



ENVIRONMENTAL ASSESSMENT BOARD

VOLUME:

54

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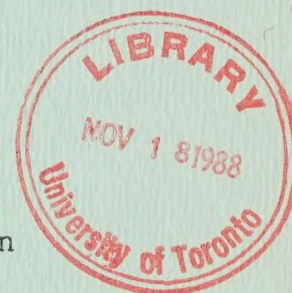
November 4th, 1988

BEFORE:

M.I. JEFFERY, Q.C., Chairman

E. MARTEL, Member

A. KOVEN, Member



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HEARING ON THE PROPOSAL BY THE MINISTRY OF NATURAL
RESOURCES FOR A CLASS ENVIRONMENTAL ASSESSMENT FOR
TIMBER MANAGEMENT ON CROWN LANDS IN ONTARIO

IN THE MATTER of the Environmental
Assessment Act, R.S.O. 1980, c.140;

- and -

IN THE MATTER of the Class Environmental
Assessment for Timber Management on Crown
Lands in Ontario;

- and -

IN THE MATTER of an Order-in-Council
(O.C. 2449/87) authorizing the
Environmental Assessment Board to
administer a funding program, in
connection with the environmental
assessment hearing with respect to the
Timber Management Class
Environmental Assessment, and to
distribute funds to qualified
participants.

Hearing held at the Ramada Prince Arthur
Hotel, 17 North Cumberland St., Thunder
Bay, Ontario, on Friday, November 4th,
1988, commencing at 8:30 a.m.

VOLUME 54

BEFORE:

MR. MICHAEL I. JEFFERY, Q.C.	Chairman
MR. ELIE MARTEL	Member
MRS. ANNE KOVEN	Member

A P P E A R A N C E S

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MR. R. LINDGREN)	
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APPEARANCES: (Cont'd)

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I N D E X O F P R O C E E D I N G S

Witness:

<u>CAMERON CLARK,</u>	
<u>FRANK KENNEDY,</u>	
<u>JOHN McNICOL,</u>	
<u>JOSEPH BEECHEY,</u>	
<u>NEVILLE WARD,</u>	
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1 ---Upon commencing at 8:40 a.m.

2 THE CHAIRMAN: Good morning. Be seated,
3 please.

4 MR. CAMPBELL: Mr. Chairman, I was
5 wondering if we could take a few moments this morning,
6 before starting, just to deal with scheduling.

7 I wish to advise the Board that I have a
8 conflict on Monday the 14th and I will not be able to
9 be at the hearing that day and it would be helpful to
10 have some idea from the other parties about how long
11 people were going to be, any other scheduling
12 difficulties, I guess principally, with the view in my
13 particular case, to determining whether I should be
14 prepared to go towards the end of next week or whether
15 it looks like the following week in any event.

16 That would certainly be helpful to me and
17 I suspect that at this point it would be helpful to
18 other parties as well to have some idea of how long
19 people are going to take. Whenever I am reached, I
20 would expect to be my usual sort of half day to a day.

21 THE CHAIRMAN: Well, perhaps, Mr.
22 Freidin, you could indicate how long you expect to be
23 in direct.

24 MR. FREIDIN: I hope to be finished by
25 the end of Monday.

1 THE CHAIRMAN: The end of Monday. And
2 then Mr. Cosman?

3 MR. COSMAN: Yes. Our cross-examination
4 will be very short, Mr. Chairman. Half an hour.

5 THE CHAIRMAN: Half an hour. Okay.

6 Ms. Swenarchuk, how long would you
7 anticipate being in cross-examination?

8 MS. SWENARCHUK: I would say one to two
9 days, Mr. Chairman.

10 THE CHAIRMAN: I will give you the
11 benefit of the doubt and say it is two, especially
12 since Mr. Cosman will be starting on -- you are going
13 to be finished at the end of Monday?

14 MR. FREIDIN: I hope so. There is a
15 possibility I will be finished before then, but I won't
16 finish today.

17 THE CHAIRMAN: Okay. So that would be
18 Tuesday and Wednesday at the outside. What about Mr.
19 Hunter -- well, I know Mr. Williams, as well, but does
20 anyone expect Mr. Hunter to be available to
21 cross-examine this panel?

22 MR. McKIBBON: Mr. Chairman, Mr. Hunter
23 asked me to indicate that he does want to cross-examine
24 this panel. We wondered whether we might not be able
25 to do it on the week of the 14th, on the Monday.

1 THE CHAIRMAN: Well, that might help you
2 out, Mr. Campbell, if Mr. Hunter went on the 14th.

3 MR. CAMPBELL: That's right. And I
4 assume Mr. Williams -- if there was time at the end of
5 next week in the normal course of events Mr. Williams
6 would cross-examine.

7 THE CHAIRMAN: Mr. Williams, how long do
8 you expect to be?

9 MR. WILLIAMS: A day or two, Mr.
10 Chairman.

11 THE CHAIRMAN: All right. So between Ms.
12 Swenarchuk and Mr. Williams and Mr. Cosman and Mr.
13 Freidin finishing off on Monday, that may well be next
14 week.

15 MR. CAMPBELL: That's very helpful.
16 Thank you.

17 THE CHAIRMAN: And then Mr. Hunter on
18 Monday and yourself. What about people like Mr.
19 Edwards or any of the other parties? Does anyone have
20 any indication whether they will be wishing to
21 cross-examine this panel?

22 (No response)

23 Okay. Well, we will proceed from there.
24 Any other preliminary matters?

25 (No response)

1 Mr. Freidin?

2 MR. FREIDIN: I will be examining Mr.
3 Beechey first, Mr. Chairman.

4 THE CHAIRMAN: Very well.

5 CAMERON CLARK,
6 FRANK KENNEDY,
7 JOHN McNICOL,
8 JOSEPH BEECHEY,
9 NEVILLE WARD,
10 GORDON PYZER, Resumed

11 CONTINUED CROSS-EXAMINATION BY MR. FREIDIN:

12 Q. Mr. Beechey, I understand that you
13 will be speaking to the paper prepared not only by
14 yourself but also the paper prepared by Mr. Davidson
15 which commences at page 493?

16 MR. BEECHEY: A. That's correct.

17 Q. And can you indicate for the Board
18 what involvement, if any, you had in the preparation of
19 that report?

20 A. Well, I can't say that I had any
21 direct involvement or collaboration that led to really
22 anything regarding the technical content. Although
23 Certainly during the preparation of the paper I did
24 discuss it with Mr. Davidson during its finalization.

25 Q. Now, you've been qualified as a
conservation biologist who is involved in the
conservation of life science features and protected

1 areas. Do you have any knowledge or qualification
2 which, in your view, would allow you to speak to the
3 matters referred to in Mr. Davidson's report?

4 A. Well, I do think that my resume does
5 sort of draw a line around my expertise fairly
6 carefully and it is in reference to life science
7 conservation as it applies to the protection mandate of
8 the Parks & Recreational Areas Program. I have to
9 point out that I am not a geologist by training and
10 that I don't have any strong academic training in the
11 science of geology.

12 I would go on to suggest though that I
13 have worked with Mr. Davidson and geological colleagues
14 over a considerable period of time, both in the field
15 and in the office and, through that, I have gained a
16 fairly good appreciation and understanding I think of
17 the principles governing the selection, protection and
18 management of geological features for conservation.

19 Q. You referred to, I believe, the
20 conservation or the protection objective of the
21 Ministry of Natural Resources. I understand that you
22 spent a large percentage of your time dealing with
23 matters attempted to achieve or attain that particular
24 objective; is that correct?

25 A. Very much so. The Ministry has as

1 one broad program objective a conservation mandate
2 which basically is to identify and protect unique and
3 representative, biological, physical, cultural and
4 historic features in Ontario and that is achieved
5 throughout quite a variety of thrusts and a variety of
6 program areas.

7 From the provincial parks point of view,
8 we play a very strong role in the achievement of that
9 mandate with a particular objective dealing with the
10 protection of provincially significant earth and life
11 science features. So my work in particular and that
12 being reported through the Bob Davidson paper do relate
13 very strongly to the achievement of the Ministry's
14 conservation objective.

15 Q. Could you indicate, Mr. Beechey, what
16 the main message that your evidence is intended to
17 convey?

18 A. Well, I suppose there is several
19 messages for sure. Certainly it's a timber EA and we
20 know what the scope of that is. I guess what we wanted
21 to do was bring a perspective to the Board that the
22 broader conservation mandate of the Ministry to which I
23 have just referred does play a role, I suppose, or does
24 relate to the concerns in timber EA -- or some of the
25 concerns respecting the protection of environmental

1 diversity and environmental features and that role is
2 certainly expressed through the provincial parks
3 program in the form of provincial parks and through
4 areas of natural and scientific interest which we will
5 be discussing somewhat later.

6 I guess overall I wanted to really make a
7 statement about the commitment of the Ministry with
8 respect to the conservation of natural diversity and
9 how it does relate to the timber EA in the region of
10 the undertaking. Certainly relate information about
11 the role of provincial parks in the achievement of
12 that mandate in protecting representative, earth
13 science and life science features within the area of
14 the undertaking or the region contained therein.

15 Relate some information about our program
16 with respect to the data collection efforts that we
17 undertake to assess and evaluate features for
18 consideration as provincial parks or as areas of
19 natural and scientific interest.

20 Beyond that, I suppose certainly talk
21 about the relationship of some of this information
22 beyond its direct application to provincial parks and
23 areas of natural and scientific interest and the use of
24 some of this information in timber management planning
25 to perhaps protect other features that have not been

1 selected for inclusion in the parks system or
2 designated as areas of natural and scientific area, but
3 nonetheless are important features in the landscape
4 that should be considered and perhaps protected.

5 I suppose the other thing I would like to
6 do, and I think it will come out quite strongly, is
7 that to indicate that our efforts have not been
8 haphazard; quite the contrary. We pride ourselves I
9 think in a very methodical approach to the way in which
10 we organize and select and protect these features in
11 Ontario and, in a sense I suppose, we are trying to
12 build an ark and on that ark we want to have board a
13 good cross-section of the representative communities,
14 plants, animals and environmental features that make up
15 the mosaic or the fabric of Ontario's natural
16 diversity.

17 I think that pretty well covers it.

18 Q. Thank you. Now, Mr. Beechey, I
19 understand that by way of introduction you feel that it
20 would be useful to briefly describe some of the recent
21 history regarding your programs' contribution towards
22 meeting the Ministry's protection mandate?

23 A. Yes, very much so. I would like to
24 refer to an overhead in doing that if I may.

25 Let me just begin by saying the purpose

1 of this overhead is to really speak to the overall
2 commitment of the Ministry in its efforts to protect
3 Ontario's natural, geological and ecological diversity.
4 And what I am going to do here is skim through about
5 nine or ten highlights, if you will, which I generally
6 term milestones that are sort of major events or
7 building blocks in a progressive fashion that the
8 Ministry has achieved over the last two decades.

9 We begin with the Provincial Parks Act
10 which really is the statutory underpinning for what we
11 do in provincial parks both in the area of protection,
12 but also in the area of recreation, tourism and
13 heritage appreciation.

14 THE CHAIRMAN: Mr. Beechey, if I could
15 just ask you to hold the mike a little further away. I
16 do not usually ask it this way around. I think you are
17 coming through a bit louder than necessary, as opposed
18 to quieter.

19 MR. FREIDIN: As opposed to Dr. Osborn
20 who you asked not to use the mike at all.

21 MR. BEECHEY: Maybe later.

22 THE CHAIRMAN: Thank you.

23 MR. BEECHEY: The Provincial Parks Policy
24 which is a Cabinet approved approved policy, 1978 is a
25 very important strategic document that provides program

1 direction for our protection efforts. It does several
2 things for us:

3 It establishes a goal and four objectives
4 for the provincial park system of which one objective
5 is the protection objective which charges provincial
6 parks with the protection of provincially significant
7 elements of Ontario's earth science and life science
8 diversity. The provincial parks policy also provides a
9 classification framework for the provincial parks
10 system in defining six classes of provincial parks -
11 and you have heard about these through Mr. Kenrick's
12 evidence - I will just skim over this very quickly.

13 Six classes of provincial parks:
14 Wilderness parks, nature reserves, natural
15 environment, waterway, recreation, and historic parks.
16 Additionally, the park policy etches out eight or ten
17 key principles that also provide direction for our
18 efforts to achieve the program goal and objectives.

19 Most important among those with regard to
20 our evidence is the representation principle which
21 deals with the notion of trying to represent a spectrum
22 or a cross-section, if you will, of the diversity of
23 the geological and ecological features in the province.
24 The variety principle which speaks to the idea of
25 diversity and the notion of trying to collect a wide

1 range of these things and have them protected within
2 the various park classes, primarily wilderness, nature
3 reserve, natural environment and waterway.

4 The permanent principle which speaks to
5 the permanence of the park system and the dedication of
6 these lands in perpetuity. And, finally, principles of
7 zoning and classification to which I have referred.

8 The zoning principle being important from
9 the point of view that it affords opportunities to
10 dedicate in a very strict fashion lands within any
11 class of provincial parks by having them dedicated as
12 nature reserve zones through an official management
13 planning process or other classes of zones as well,
14 such as historic zones.

15 The provincial parks policy was issued in
16 '78 and followed very closely by a manual, if you will,
17 titled the Ontario Provincial Parks Planning and
18 Management Policies. And in this particular document
19 provides an elaboration of the principles of
20 classification, zoning and systems framework with park
21 targets.

22 So, from our point of view, it is a very
23 strategic document in articulating fairly carefully the
24 requirements for a provincial park system in Ontario.

25 This is all sort of a backdrop leading

1 into our evidence package dealing with the roles that
2 myself and Mr. Davidson and others had with respect to
3 a major system planning effort that followed shortly on
4 the heels of the provincial policy after it was
5 introduced. And it was the intent of this system
6 planning effort, if you will, to take the targets as
7 they were set out in the policy and to determine the
8 adequacy of the existing park system of the day in
9 meeting those targets, go on to identify the gaps, if
10 you will, that were out there and not being achieved by
11 provincial parks, and go beyond that to identify
12 significant candidates that might be considered as
13 additional parks of various classes in order to meet
14 park class targets as set out in the planning and
15 management policies.

16 Our role in that related most directly to
17 an assessment and an evaluation of the adequacy of the
18 provincial park system in terms of representing the
19 elements of geological and ecological diversity which
20 had been defined or set out in two fairly elaborate
21 frameworks which we will be getting to a little later.

22 This work extended over a period of four
23 years and resulted in the accumulation and documentation
24 of a tremendous amount of information on the existing
25 park system, as well as a lot of information on areas

1 outside of parks.

2 A good many of the areas were evaluated
3 and put forward as candidate provincial parks which
4 were issued in a report titled: the Task Force Report
5 on Park System Planning. That report put forward 255
6 candidate provincial parks in all classes and included
7 a very important suite of wilderness parks and nature
8 reserve parks that contributed very strongly toward the
9 targets we had set out for representation.

10 Public consultation on that document,
11 along with internal review, resulted in identifying a
12 large series of candidates that could not be put
13 forward as provincial parks because of other
14 commitments on the land base, conflicting land uses and
15 other reasons.

16 As a result of that the Ministry, still
17 concerned about these sites, moved forward with the
18 development of another policy initiative to provide
19 another vehicle outside of the park system to protect
20 some of these areas and these areas are termed areas of
21 natural and scientific interest and have been approved
22 in a very short policy circular endorsed by Cabinet in
23 1983.

24 Q. Just one moment then. So when we are
25 talking about areas of natural and scientific interest,

1 we are talking about areas outside of the boundaries of
2 provincial parks?

3 A. That's correct.

4 Q. Thank you.

5 A. The final recommendations on
6 provincial parks arising out of the review of the 255
7 candidates in the Task Force Report gave rise to 155
8 parks that were recommended for establishment
9 throughout Ontario in a document approved by cabinet in
10 1983 titled: The Backgrounder Land Use Guidelines and
11 that's the umbrella document that also gave approval to
12 the issue of the District Land Use Guidelines which
13 were the vehicle for designating some 564 areas of
14 natural and scientific interest across the province,
15 some of which occur in the area of the undertaking.

16 Just on a slightly different tangent, but
17 still on the notion of an expression of commitment of
18 the Ministry to that program area, the Ministry about
19 the same time, in 1983, played a lead role in forming a
20 new organization in Ontario called the Natural Heritage
21 League which is grown to be a 28-member coalition of
22 conservation-minded organizations including prominent
23 government organizations, our Ministry, the Ministry of
24 Culture and Communication, the Ontario Heritage
25 Foundation, along with a number of non-government

1 organizations; World Wildlife Fund Canada, The Nature
2 Conservancy of Canada, the Federation of Ontario
3 Naturalists, the Ontario Federation of Anglers &
4 Hunters and others.

5 The Natural Heritage League is proving to
6 be a very effective vehicle for dealing with the
7 protection of sites through cooperative efforts by
8 league members and, in fact, there is work ongoing
9 going on a number of sites which fall on something
10 called the League's action list including some 40 areas
11 of natural and scientific interest at this time, some
12 of which occur in and around the region of the
13 undertaking.

14 The policy on areas of natural and
15 scientific interest was followed by the issue of a
16 document by the Ministry in 1987, the Implementation
17 Strategy for Areas of Natural and Scientific Interest
18 which was a short guidelines manual to provide field
19 direction on the protection and management of sites
20 that had been designated through the District Land Use
21 Guidelines.

22 Another recent expression of commitment
23 Thrown Speech '87, government announced that it will be
24 moving forward with new legislation for ecological
25 reserves in Ontario and this is intended to provide

1 another statutory mechanism to provide still more
2 rigorous protection on areas currently regulated as
3 nature reserves in the park system and provide
4 opportunity for the inclusion of other sites.

5 More recently still the new park policy
6 commitment by the Minister and based on a Cabinet
7 decision to go forward with the final 53 recommended
8 parks that had arisen through the Backgrounder, four
9 steps back, and to basically cleanse the park system if
10 you will and restore the purity of wilderness parks
11 and nature reserves to the earlier 1978 planning and
12 management standards.

13 And, finally, again another initiative,
14 the Conservation Land Act proclaimed by government in
15 June of 1988 provides a statutory framework to deal
16 with areas of natural and scientific interest, wetlands
17 and two or three other categories of conservation
18 lands. It is general enabling legislation which
19 permits the Minister to introduce initiatives, to move
20 forward with the protection of those land categories
21 and initially it is going to be the vehicle to
22 implement a tax rebate program for private landowners
23 in southern Ontario.

24 So I think in summary I just want to make
25 the point that over the last 15 or 20 years there have

1 been quite a range of quite progressive initiatives
2 that our advancing our front very directly in terms of
3 protecting environmental diversity in parks and areas
4 of natural and scientific interest.

5 And that does relate very much, in part,
6 to the area of the undertaking insofar as we do have a
7 number of areas of natural and scientific interest
8 already designated through District Land Use Guidelines
9 and other proposals coming forward.

10 Q. Mr. Beechey, the areas of natural and
11 scientific interest which are located outside of
12 provincial parks, are they located on Crown land and
13 private land, or on only one of those categories?

14 A. They are located on both. There are
15 a good many in southern Ontario on private lands, some
16 on public land and certainly, in the area of the
17 undertaking, on Crown land.

18 Q. Is achievement of the protection
19 objectives of the Ministry contributed to by other
20 jurisdictions?

21 A. Very much so. We recognize the
22 efforts of other organizations, other levels of
23 government in contributing to our protection objective.
24 Not so much so in northern Ontario although, for
25 example, we do recognize the efforts of national parks

1 in complementing our efforts to protect large
2 wilderness areas in the province and, in particular,
3 Pukasaw National Park on the east shore of Lake
4 Superior in fact, in our view, fulfills our target to
5 represent a wilderness park within that particular
6 region of the province.

7 Q. Now, behind you you have two maps
8 which relate to the areas of natural and scientific
9 interest; is that correct?

10 A. That's correct.

11 Q. Could you perhaps describe those maps
12 to the Board and we will have them marked as exhibits
13 as you go. You are not going to be able to take that
14 with you.

15 A. I don't think so.

16 MS. SWENARCHUK: Mr. Chairman, can you
17 move it closer.

18 MR. BEECHEY: I don't need it.

19 THE CHAIRMAN: Is it possible -- I know
20 those are very large. I guess they cannot go on the
21 easel.

22 MR. FREIDIN: I don't think they would go
23 on the easel and I think that even if they are moved up
24 they are going to be very, very difficult to see in
25 terms of the circles and the squares.

1 THE CHAIRMAN: All right. You may have
2 to --

3 MS. SWENARCHUK: What about over here?

4 THE CHAIRMAN: Well, I think if we have
5 to, we will all just go up there and take a closer
6 look.

7 MR. FREIDIN: I think that would probably
8 be a good suggestion, Mr. Chairman. So perhaps if you
9 wanted to go up now.

10 MR. BEECHEY: I have to apologize for the
11 quality of the exhibits but perhaps we can dress them
12 up to make them a little more colourful. I have the
13 relevant material set out for the Board.

14 THE CHAIRMAN: Hold on a second. We are
15 having trouble with the court reporter being able to
16 hear.

17 Can you stand over here and do it from
18 here.

19 MR. BEECHEY: Sure. The maps really look
20 much more complex than they actually are.

21 The two sheets simply illustrate the
22 location of existing areas of natural and scientific
23 interest that have been designated within the District
24 Land Use Guidelines issued in 1983 which I referred to
25 and all of the sites shown on the southern Ontario

1 sheet here -- I have put on here the boundary in faint
2 yellow here and, as I say, we can dress this up.

3 This is the southern boundary of the area
4 of the undertaking, so it will give you some idea of
5 the sites that are located and presently designate
6 within District Land Use Guidelines that fall within
7 the area of the undertaking.

8 THE CHAIRMAN: Okay. Hold on a second.
9 I think we are going to have some trouble here. Why
10 don't we move this over --

11 MR. BEECHEY: Okay. These maps simply
12 illustrate the areas of natural and scientific interest
13 that have been designated in the District Land Use
14 Guidelines since June -- on June of 1983.

15 THE CHAIRMAN: All right, Mr. Beechey.
16 For the purposes of the record we will mark this one as
17 Exhibit 322.

18 MR. BEECHEY: Okay.

19 THE CHAIRMAN: And that will be entitled
20 a map indicating areas of natural and scientific
21 interest?

22 MR. BEECHEY: In southern Ontario.

23 THE CHAIRMAN: In southern Ontario.

24 ---EXHIBIT NO. 322: Map depicting areas of natural and
25 scientific interest in southern
Ontario.

1
2 MR. BEECHEY: Just briefly explain the
3 boundary of the area of the undertaking has been
4 superimposed on here to highlight the sites that fall
5 within the area of the undertaking on this map sheet.

6 Respecting the code: Circular codes
7 simply indicate geological sites; the square box codes
8 indicate ecological or life science sites, and the
9 diamond configurations indicate sites that are of
10 combined geological and ecological interest.

11 So you see in the area of the undertaking
12 you have a mix of all three of those categories on this
13 particular sheet.

14 The adjoining sheet for northern Ontario
15 which I believe went in earlier to the reading room as
16 a reference document again illustrates the areas of
17 natural and scientific interest that were designated in
18 the June '83 Guidelines and those are highlighted in
19 yellow and are concentrated in northcentral and
20 northwestern region.

21 THE CHAIRMAN: We will mark that Exhibit
22 323.

23 MR. BEECHEY: Title that areas of natural
24 and scientific interest in northern Ontario.

25 ---EXHIBIT NO. 323: Map entitled: Areas of Natural

1 and Scientific Interest in
2 northern Ontario.

3 MR. BEECHEY: Additionally this map
4 illustrates a series of candidate areas that have been
5 documented but have not yet been designated through
6 District Land Use Guidelines.

7 These areas are under consideration and
8 review, they have not been put forward publicly at this
9 point, but all of them have been documented to our
10 standards and are serious candidates for inclusion as
11 designated sites.

12 The coding remains the same: Circles,
13 geological sites; squares, ecological sites; and
14 diamonds, sites of combined interest.

15 THE CHAIRMAN: Thank you.

16 MR. FREIDIN: Q. Now, Mr. Beechey, your
17 paper and the paper of Mr. Davidson referred to earth
18 science features and to life science features. Could
19 you advise what those features are?

20 MR. BEECHEY: A. Yes, I could. I
21 brought along a few slides I think. I think that might
22 be the best way to deal with this by actually
23 illustrating some of these features and the approach
24 that we have taken to organizing or classifying them.

25 So I think I will go to a few slides.

1 Q. Would someone...

2 A. Could we have the lights, at least
3 the front panel here.

4 THE CHAIRMAN: Are these slides
5 reproduced anywhere, Mr. Freidin?

6 MR. FREIDIN: No, they are not. We will
7 undertake to provide hard copies as exhibits.

8 MR. BEECHEY: In the main these...

9 MR. FREIDIN: So, Mr. Chairman, I will
10 leave it up to you as to whether you want to reserve
11 exhibit numbers for them as they go in or...

12 THE CHAIRMAN: Well, perhaps if you could
13 write down the order in which they are going in, we
14 will mark them Exhibits 324 and I guess A, B, C, D, and
15 E as we go along.

16 MR. FREIDIN: Okay.

17 THE CHAIRMAN: If you could produce them
18 for us at some stage in that order?

19 MR. FREIDIN: Okay.

20 THE CHAIRMAN: We will mark them in that
21 order.

22 MR. BEECHEY: I should say in the main
23 that all of these slides relate to material that is in
24 the evidence package and they are an attempt I suppose
25 to illustrate if you will some of the concepts and

1 principles that we have introduced through the
2 evidence.

3 I referred to the provincial parks
4 policy. That really is the basis for the direction for
5 our efforts to identify and protect earth science
6 features. Along with the policy there was a Cabinet
7 approved guideline titled an Earth Science Policy
8 Guideline which charged the program with the
9 responsibility to protect a system of earth science
10 features representative of Ontario's earth science
11 history and diversity.

12 Our concern here --

13 MR. FREIDIN: Mr. Chairman, just for the
14 record, perhaps I'll just indicate as he puts the slide
15 up what it is so that when we are reading that
16 transcript we will be able to follow along.

17 THE CHAIRMAN: All right.

18 MR. FREIDIN: That is Exhibit 324A.

19 ---EXHIBIT NO. 324A: Slide depicting diversity of
20 bedrock geology.

21 MR. BEECHEY: Our concern with respect to
22 the earth sciences or geological component is with the
23 representation of the diversity of bedrock geology that
24 occurs in Ontario. Very simply, the bedrock geology of
25 the province is quite complex and records some three

1 billion years of earth history, the oldest units being
2 concentrated along the Precambrian Shield illustrated
3 in blue on the diagram.

4 That backbone, if you will, is flanked by
5 Paleozoic bedrock in the Hudson Bay lowland to the
6 north and southern Ontario and St. Lawrence lowlands to
7 the south and that bedrock basically records the
8 evolution of some 600-million years of earth history.

9 MR. FREIDIN: 324B.

10 ---EXHIBIT NO. 324B: Slide entitled: Generalized
11 Surficial Geology of Ontario.

12 MR. BEECHEY: We are also concerned about
13 the protection of the surficial geology of the
14 province.

15 MR. FREIDIN: Q. And, Mr. Beechey, 324B
16 is a slide entitled: Generalized surficial geology of
17 Ontario?

18 MR. BEECHEY: A. Here the features that
19 we are concerned with are geological features of
20 unconsolidated material that have been deposited atop
21 the bedrock by various processes, mainly glaciation and
22 deposition from marine and fresh water environments.

23 These features give expression to a lot
24 of the topography relief and variety that we are
25 familiar with across Ontario and they include a series

1 of quite sensitive features, glacial features of
2 various kinds.

3 MR. FREIDIN: The next Exhibit 324C.

4 ---EXHIBIT NO. 324C: Slide depicting geological
5 features of unconsolidated
6 material.

6 MR. BEECHEY: Just looking at some of the
7 features in particular: Upper left, we are interested
8 in representing the various units of bedrock types that
9 occur in the province.

10 Upper right, the fossil assemblages and
11 record of evolution that is included within the
12 sedimentary bedrock history of the province.

13 Lower left, various land form features
14 glacial and otherwise. And lower right, various
15 submarine forms that have evolved in ancient fresh
16 water or marine environments.

17 So this just gives you a feeling for sort
18 of the range of diversity, the range of features that
19 we are concerned with protecting.

20 MR. FREIDIN: 324D.

21 ---EXHIBIT NO. 324D: Slide entitled: Earth Science
22 Classification Framework.

23 MR. BEECHEY: We have undertaken to
24 establish a classification to organize these features
25 to facilitate their selection. The middle column

1 referring to the previous slide, the units of concern,
2 the various rock strata comprising the geological
3 history, fossil assemblages contained within those rock
4 strata, the various land forms and submarine forms.

5 These two features are basically
6 stratigraphic, these two are basically topographic, all
7 have evolved and developed through geological processes
8 of one kind or another.

9 Our classification is based on widely
10 internationally accepted concepts for classification of
11 geological features with a stratigraphic classification
12 dealing with rock strata, biostratigraphic
13 classification dealing with fossil components, and
14 geomorphological classification dealing with land forms
15 and submarine forms.

16 And these three categories of
17 classification are tied together through
18 chronostratigraphy, or time, very basically into 44
19 major environments.

20 MR. FREIDIN: Mr. Chairman, Exhibit 324D
21 is also reproduced at page 497 of the witness
22 statement. We now have Exhibit 324E.

23 ---EXHIBIT NO. 324E: Slide defining themes and units
24 within Middle Aphibian.

25 MR. BEECHEY: Just looking at the

1 application of this classification, one simple example
2 titled Middle Aphibian. This is one theme of the 44
3 which includes eight -- I believe nine bedrock units
4 titled under features on the right.

5 The aphibian illustrated in green shows
6 an early continent -- an early part of continental
7 North America flanked by ancient seas, Middle Aphibian
8 on the north and the south. The features represented
9 in this particular theme are all concentrated around
10 the Lake Superior basin.

11 So this simply illustrates how the themes
12 are defined, the units are defined within the themes,
13 and that provides a checklist, if you will, for the
14 kinds of features we are trying to represent for that
15 particular unit.

16 MR. FREIDIN: We now have Exhibit 324F on
17 the screen.

18 ---EXHIBIT NO. 324F: Slide depicting physical
19 expression of various units.

20 MR. BEECHEY: Physical expression of some
21 of these units varies. This is still with the
22 Aphibian. On the upper left, Kakabeka, the rock cliffs
23 in the gorge exposing several of the gun flint units
24 referred to on the previous slide.

25 On the upper right, again, vertical

1 stratigraphic exposures showing rock distinctive rock
2 units with an identifiable contact. Lower left fossil
3 assemblages and, on the lower right, shelving
4 conglomerate bedrock also bearing fossil assemblages in
5 this particular theme area or theme unit.

6 MR. FREIDIN: Exhibit 324G.

7 ---EXHIBIT NO. 324G: Slide depicting bar diagram of
8 units and incidence of
occurrence.

9 MR. BEECHEY: Our work involved taking
10 this classification, assembling the information for
11 provincial parks and determining which of the units
12 were all already represented with quality fine
13 exposures depicting the character and nature of the
14 various features.

15 This simple bar diagram illustrates the
16 units on the left axis and their incidence of
17 occurrence along the horizontal axis in terms of the
18 number of sites and where they occurred within the park
19 system or within areas of natural and scientific
20 interest.

21 For this particular theme then you can
22 see that of the nine units displayed there -- of the
23 eight units, six of them are represented within the
24 park system and/or within areas of natural and
25 scientific interest with two units not yet represented

1 in the system.

2 MR. FREIDIN: The slide here, I don't
3 think we will make it an exhibit, but it is titled:
4 Life Science Policy Guideline and it states:

5 "To protect a system of life science
6 features representative of Ontario's life
7 science history and diversity."

8 MR. BEECHEY: This particular guideline
9 is complementary to the Earth Science Guideline in
10 providing program direction on the identification and
11 protection of life science features.

12 MR. FREIDIN: We now have Exhibit 324H
13 titled: Natural Vegetation Regions of Ontario.

14 ---EXHIBIT NO. 324H: Slide titled: Natural Vegetation
15 Regions of Ontario.

16 MR. BEECHEY: From a life science
17 perspective we are interested in capturing the range of
18 ecological diversity within the province. That range
19 extends from southern deciduous or carolinian forests
20 in the extreme south, to subarctic conditions. Tender
21 lake conditions in the far north.

22 In the area of the undertaking it
23 incorporates a good portion of the boreal forest
24 region, the lighter tone in northern Ontario and the
25 Great Lakes/St. Lawrence forest region or deciduous

1 evergreen forest region also referred to by John
2 McNicol yesterday.

3 MR. FREIDIN: We now have a slide with
4 four photos which will be Exhibit 324I.

5 ---EXHIBIT NO. 324I: Composite of four slides of
6 native flora and fauna of the
province.

7 MR. BEECHEY: The specific features of
8 concern that we are trying to represent include the
9 native flora of the province depicted by an example in
10 the upper left. Habitat and occurrences of native
11 fauna within the province with more emphasis yet on
12 representing the range of environments and biological
13 communities depicted in the lower left and, finally,
14 representation of some of the major vegetation habitat
15 patterns or what we refer to as distinctive landscape
16 units within the province.

17 MR. FREIDIN: The next slide consists of
18 four slides will be 324J.

19 ---EXHIBIT NO. 324J: Slide depicting four photos of
20 representative landscapes.

21 MR. BEECHEY: We try to capture this
22 diversity through the selection of representative
23 landscapes within different parts of the province.

24 In southern Ontario, of course, we are
25 dealing with a much fragmented landscape and here we

1 are dealing with remnant natural areas.

2 In the area of the undertaking and north
3 of there we are dealing with largely in tact extensive
4 regions comprised of largely natural vegetation.

5 MR. FREIDIN: The next Exhibit 324K is a
6 map or slide of a map titled: Site Regions of Ontario.
7 ---EXHIBIT NO. 324K: Slide entitled: Site Regions of
8 Ontario.

9 MR. BEECHEY: Our approach to selecting
10 areas is based on a site regional framework that was
11 developed by the Ministry, the former Department of
12 Lands and Forests through forest site research in the
13 50s and the 60s.

14 This theme provides a top down approach
15 to classifying ecological diversity with the largest
16 spacial units, if you will, being 13 site regions as
17 depicted there.

18 The site regions have been determined on
19 the basis of physiographic and climatic criteria and
20 provide sort of a very course level of homogeneity at a
21 regional level in the province.

22 We have used this particular level of the
23 site regional framework to establish targets for
24 wilderness parks and our target is to represent one
25 wilderness park within each of the site regions.

1 MR. FREIDIN: The next slide will be
2 324L.

3 ---EXHIBIT NO. 324L: Slide illustrating distribution
4 of wilderness parks and
5 wilderness zones within the
6 provincial park system.

7 MR. BEECHEY: This slide illustrates the
8 distribution of wilderness parks, the large green dots,
9 and wilderness zones, the smaller fainter green dots
10 within the current provincial park system.

11 Those wilderness parks include the
12 several that existed before 1983, as well as five that
13 were brought into regulation as a result of the
14 strategic land use planning to which I referred.

15 Within the area of the undertaking,
16 basically site regions 3, 4, and 5 we have five
17 wilderness parks as well as zones established --
18 wilderness zones established within four natural
19 environment parks.

20 I referred earlier to the fact that for
21 site region 3E on the right we recognize that Pukawsa
22 National Park on the shore of Lake Superior does
23 fulfill our wilderness target.

24 MR. FREIDIN: If we could just go back to
25 that slide, Mr. Beechey, a copy of Exhibit 324L,
without the wilderness parks noted on it, will be found

1 at page 397 of the witness statement.

2 That is in this case, Exhibit 266B. Very
3 well, go ahead. The next slide will be Exhibit 324M.

4 ---EXHIBIT NO. 324M: Slide entitled: Site district
5 framework.

6 MR. BEECHEY: The next level of division
7 within the site regional framework is a series of 65
8 site districts which are finer sub-divisions of the
9 site region on the basis of largely physiographic
10 criteria.

11 Again, we have tied our system to these
12 units in using these as a basis to establish targets
13 for the natural environment park class and for the
14 waterway park class where we have attempted to
15 represent each of those districts with one major
16 natural environment park.

17 Again, within the area of the undertaking
18 site regions 3, 4 and 5 we have near complete park
19 class target representation with the new provincial
20 parks that have been introduced since 1983.

21 MR. FREIDIN: The next slide will be
22 Exhibit 324N.

23 ---EXHIBIT NO. 324N: Slide depicting site districts of
24 northern Ontario.

25 MR. BEECHEY: Site districts, northern

1 Ontario.

2 MR. FREIDIN: Thank you.

3 MR. BEECHEY: We also make use of the
4 site district framework as a basis to determine
5 landscape representation targets to protect examples of
6 the communities and landscape systems that occur within
7 the site regions.

8 By way of example, in site region 4E in
9 the area of the undertaking on the east shore of Lake
10 Superior, the Algoma site district is characterized by
11 a till mantled rolling Precambrian upland.

12 MR. FREIDIN: And we now have a slide
13 which will be 3240, it is composite of four slides.

14 ---EXHIBIT NO. 324 0: Composite of four slides
15 depicting pattern of vegetation.

16 MR. BEECHEY: This particular land unit
17 displays a very distinctive pattern of vegetation types
18 and communities.

19 In forestry terms tolerant hardwoods
20 primarily pure sugar maple associations typically on
21 the crests of the hills, merging with sugar maple
22 yellow birch associations on the slopes, those with
23 grading with mixed wood and lowland forest types toward
24 the shorelines of the lakes and these finally merging
25 with a system of lakeshore communities containing a

1 distinctive array of wetland and sedge meadow types.

2 MR. FREIDIN: Q. Before you leave that,
3 perhaps you could just indicate which of those slides
4 represents which of the features that you referred to?

5 MR. BEECHEY: A. Upper left slide simply
6 displays a pattern that I have described panoramic shot
7 showing the relationship of the various forest types.
8 Upper right illustrates a sugar maple yellow birch
9 community on the slopes. Lower left indicating mixed
10 forest conifer largely on the lower slopes. And the
11 lower right illustrating a sedge meadow flanking one of
12 the lakes.

13 Q. Mr. Beechey, and if we have similar
14 slides like that, if you could indicate which slide you
15 are referring to when you are giving your evidence.

16 A. Okay. I use this slide to illustrate
17 that in our system this particular landscape unit would
18 be one target. We would like to represent an in tact
19 example of this pattern of vegetation and land form
20 features.

21 And, by doing that, we automatically
22 represent the constituent communities and the
23 constituent plants and many of the animals that inhabit
24 that environment. In actual fact, this particular
25 ecosystem is very well represented in Lake Superior

1 Provincial Park where very good examples of it are
2 afforded strict protection within wilderness zones and
3 a nature reserve system within the park.

4 So this illustrates the conceptual
5 approach and how we deal with it in terms of protecting
6 it in a park setting.

7 Q. And your evidence in relation to that
8 provincial park was referencing the top left slide; was
9 it?

10 A. Referencing the whole system.

11 Q. The whole system.

12 A. One more quick example to illustrate
13 how this top down approach picks up lower levels of
14 diversity.

15 Q. And this will be 324P, Site
16 Districts - I can't read - of regions -- give it a
17 title.

18 A. Port Arthur hills.

19 ---EXHIBIT NO. 324P: Site Regions of Port Arthur
20 hills.

21 MR. FREIDIN: Q. All right.

22 MR. BEECHEY: A. The Port Arthur hills
23 is a distinctive site district in site region 3W, we
24 are sitting in it right now.

25 All of you will be familiar with the very

1 prominent topography, the dramatic cliff faces,
2 tablelands that characterize the Sibley Peninsula, some
3 of the outer islands and the interior mainland.

4 Again, this topography in land form
5 supports a very distinctive predictive pattern of
6 vegetation and plant community types. Mixed forest on
7 thin soils on the tablelands, lichen communities on the
8 cliff faces, usually dwarf birch forests on the scree
9 slopes subtending the base of the cliff and various
10 kinds of lichen communities along the tallo slopes
11 along the bottom.

12 MR. FREIDIN: And the evidence that you
13 have just given in relation to those cliffs and the
14 topographical and land form was speaking to a slide
15 which will be 324Q.

16 ---EXHIBIT NO. 324Q: Slide depicting cliffs,
17 topography and land forms.

18 MR. BEECHEY: In some situations where we
19 have cliffs like this opposing one another forming
20 impressive canyons within this region, these give rise
21 to colder than normal situations within the canyon
22 floor and there can be stagnant ice in some of these
23 areas well into the summer. These areas are of
24 particular interest --

25 MR. FREIDIN: We now have a slide 324R.

1 ---EXHIBIT NO. 324R: Slide depicting subarctic plant
2 life.

3 MR. BEECHEY: This particular species is
4 *Pyrola grandeflora*. It is a subarctic species that
5 occurs prolifically within one of our nature reserves
6 within the Port Arthur hills area, Cavern Lake Canyon
7 which in fact probably supports the most extensive
8 population of this species disjunct from its range in
9 the Hudson Bay lowlands and further north.

10 MR. FREIDIN: The next slide, 324S.

11 ---EXHIBIT NO. 324S: Slide depicting subarctic plant
12 species.

13 MR. BEECHEY: Another very interesting
14 cardilian subarctic species *arnica loncophila* occurs
15 within the canyon on the floor, as well as in similar
16 sites in Sibley and other selected locations within the
17 Lakehead region.

18 MR. FREIDIN: Next slide 324T.

19 ---EXHIBIT NO. 324T: Slide depicting subarctic
20 species.

21 MR. BEECHEY: Still another subarctic
22 species *lichopodium silego* also a member of this
23 community occurring extensively in Cavern Lake, I
24 believe at Sibley, and certainly on other sites on the
25 north shore.

1 We have it as well in the Lake superior
2 Provincial Park in similar colder than normal
3 situations on the east shore.

4 MR. FREIDIN: Next slide 324U.

5 ---EXHIBIT NO. 324U: Slide depicting subarctic
6 species.

7 MR. BEECHEY: And finally woodsia
8 alpaena. This little species is very delicate. The
9 leaves that you see there are only about three or four
10 inches in length, very rare in the region.

11 Again, this occurs in Cavern Lake Canyon
12 and at a few other stations I believe, but I am not
13 sure. My point here is that the top down approach that
14 we have taken towards selecting provincial parks and
15 areas of natural and scientific interest, working
16 through landscapes as a broad filter picks up an awful
17 lot of the constituent communities and the constituent
18 plants and animals that comprise those communities.

19 MR. FREIDIN: We now have 324V which is a
20 composite of four slides.

21 ---EXHIBIT NO. 324V: Slide depicting constituent
22 communities in terms of structure
23 and composition of plant and
animal life.

24 MR. BEECHEY: Of course, as time and
25 resources permit we do want to document these areas in

1 more detail, specifically document the constituent
2 communities in terms of the structure and composition
3 of their plant and animal life. This work is ongoing
4 in connection with management planning in provincial
5 parks.

6 MR. FREIDIN: We now have a slide 324W
7 and what is that slide?

8 ---EXHIBIT NO. 324W: Slide of vegetational matrix.

9 MR. BEECHEY: We will just call it
10 vegetational matrix. We have been making an attempt to
11 survey and document these various areas and describe
12 the communities in a manner that we can classify them
13 within a matrix such as this on a regional basis.

14 This matrix provides a theoretical
15 framework base largely on the concepts of site
16 classification and incorporates a community
17 classification as well.

18 A 150 theoretical environments defined on
19 the basis of the soil moisture, microclimate and
20 sub-strait. The areas blocked out in green identify
21 those sites for which communities have been documented
22 within this particular region within the area of the
23 undertaking.

24 The blocks indicated with a black
25 insignia indicate the particular sites where

1 communities have been documented within a particular
2 park in the area of the undertaking, West Meath on the
3 Ottawa River.

4 That is it for the slides.

5 MR. FREIDIN: I was wondering what we
6 were going to do if we got past Z. Well done.

7 Q. Now, Mr. Beechey, can you advise me
8 whether this approach to the protection of
9 representative landscapes or features is an approach
10 used in any other large jurisdictions?

11 MR. BEECHEY: A. Many jurisdictions,
12 Canadian and elsewhere, have developed various
13 classification systems to guide their efforts to
14 establish parks, protective areas, reserves of various
15 kinds.

16 Across Canada a number of provinces have
17 developed systems, not dissimilar to that in Ontario.
18 None though, I believe, have come close to establishing
19 on the ground a system of protected areas that
20 represent the elements that are set out in their
21 respective classifications.

22 I sit as a member of the Resident Council
23 of Ecological Areas. In my capacity as chairman, one
24 responsibility is to hear jurisdictional reports from
25 the various provinces, the federal government and the

1 Northwest Territories on an annual basis.

2 And it is with some pride I guess that I
3 say that most jurisdictions look at Ontario in various
4 envious terms in terms of the system of protective
5 areas that we have put in place to protect the
6 ecological diversity of plants and animals that live in
7 a network of natural areas.

8 Q. Could you advise me whether the
9 preparation of the inventory of earth and life sciences
10 was done as one exercise or whether they were done
11 separately?

12 A. Administratively it was conducted as
13 one exercise. There was special funding approved for
14 it in 1977 that came from Management Board and that
15 funding was to cover a series of surveys conducted
16 between 1977 and 1981, surveys both of life sciences
17 undertaken in a site regional context and surveys for
18 earth sciences undertaken in an administrative regional
19 context.

20 Main office provided the overall
21 direction for that particular survey, responsibility if
22 you will, for selecting contractees, professional
23 contractees to do the work, screening the individuals
24 and providing overall direction on the technical
25 aspects of work.

1 The work itself was largely supervised at
2 a regional level with the contractees based out of the
3 various administrative regions.

4 Q. And how did the product of those two
5 exercises compare?

6 A. In general terms, once again, there
7 are some similarities and there are some differences.

8 They are similar in the sense that they
9 have worked from the classifications that I have spoke
10 to; they have dealt, first of all, with trying to come
11 to grips with defining what is represented within the
12 provincial parks as of the date that the surveys were
13 done; they identified gaps within the representation
14 within provincial parks, and they went on to identify a
15 series of candidate sites that were put forward for
16 consideration as provincial parks.

17 Much of those candidates that I have
18 noted are among the 155 new provincial parks that have
19 been brought in since 1983.

20 Q. Do you believe it is important for
21 you to explain how those inventories were undertaken?

22 A. I suppose it would be of interest to
23 the Board, but I don't think it is all that important.
24 I think, by far, the more important thing for the Board
25 to know is that these inventories did generate in

1 standardized fashion, a level of information that first
2 of all was used in the selection of park, areas of
3 natural and scientific interest, but as a byproduct of
4 that because of the comparative approach that was taken
5 in assessing candidate areas they have also generated a
6 considerable volume of information on other sites that
7 are not put forward as parks for one reason or another.

8 So, in that sense, they do provide very
9 useful information that can be considered in the course
10 of timber management planning.

11 Q. In the two reports, yours and Mr.
12 Davidson's report dealing with earth and life science
13 features, am I correct that two levels of ecological
14 studies are identified?

15 A. That's correct.

16 Q. Can you just indicate what those two
17 levels are?

18 A. We have defined two levels of survey
19 in line with our own program objectives. We have been
20 dealing mainly this morning with the system planning
21 component which is a program function dealing with the
22 identification and evaluation of sites for
23 consideration as provincial parks or as areas of
24 natural and scientific interest, and we have identified
25 in the evidence package area identification studies.

1 In addition to that, we do have a more
2 intensive series of surveys which are undertaken
3 primarily to service our management planning needs and
4 development of management plans for provincial parks
5 and other areas.

6 These tend to be more rigorous, they
7 capture more detailed information but, to date, most of
8 those have been undertaken in provincial parks.

9 Q. And the surveys that you just
10 referred to, are they referred to as ecological area
11 surveys?

12 A. That's correct.

13 Q. Although you indicated that you
14 didn't believe we should spend much if any time on
15 process, I understand that you believe it would be
16 helpful to give a very short description of what is
17 involved in area identification studies?

18 A. I can make some comments to inform
19 the Board about the kinds of work that is undertaken
20 leading to the products that I have referred to.

21 Pretty much there is a standard regimen
22 for the kind of work that we do with area
23 identification work studies. I suppose we can
24 generally slot that into three sort of broad functions,
25 what I would call a pre-field work which is basic

1 organizational work that an individual undertakes to
2 organize him or herself to carry out the survey; the
3 actual field work component which is not oftentimes a
4 major component in area identification studies because
5 of the extensive nature or extensive area that one
6 often deals with; and finally post-field work dealing
7 with the completion of reports that provide
8 documentation of the regions under study as well as the
9 specific studies that have been identified and
10 described in the course of survey.

11 Q. Was any record made based on these
12 area identification studies?

13 A. Yes. In connection with the system
14 planning work, sort of two levels of documentation were
15 put in place. An environmental data card which is
16 referred to in the evidence package.

17 Q. And I believe you will find a copy --
18 or an example of that at page 510 of the witness
19 statement?

20 A. That's correct. And, additionally, a
21 more rigorous check sheet level of documentation with
22 specific check sheets for earth sciences and life
23 sciences.

24 Q. And an example of an inventory check
25 sheet in relation to life science is found at page 407

1 to 432 of the witness statement; an example of an
2 inventory check sheet in relation to an earth science
3 feature is found at pages 509 to 510 of the witness
4 statement.

5 And do you believe it would be useful for
6 you to refer to one of those perhaps, Mr. Beechey, and
7 give the Board a sense of the sort of information that
8 is in fact recorded.

9 A. I think it may be helpful in their
10 understanding of the level of information that is
11 collected and how it is organized. I will refer to the
12 Guide to the Life Science Inventory Checklist on page
13 40 in the evidence package.

14 This checklist was actually developed --
15 THE CHAIRMAN: Page four hundred and
16 something?

17 MR. BEECHEY: Oh, I am sorry, page 407.

18 THE CHAIRMAN: Thank you.

19 MR. BEECHEY: The 7 is missing there.

20 I'm sorry.

21 This checklist was actually developed
22 about three years before the work was initiated in 1977
23 in connection with the site regional studies that we
24 have been discussing. The checklist is developed to
25 include as illustrated on page 413.

1 MR. FREIDIN: Q. So what we have done is
2 from page 407 to 412 inclusive we have instructions
3 which are given to people who are in fact doing the
4 inventory?

5 MR. BEECHEY: A. That's correct. Pages
6 407 to 412 are an instructional guide, key to the
7 sample check sheet.

8 So if I may just back up for one second
9 to page 408, you will see a series of numbered entries
10 on the left column. If you refer to those numbers and
11 look at page 413 - if you can flip between the two -
12 you will see that those numbers correspond with various
13 boxes or slots in the check sheet.

14 So the guide provides basically then
15 instructions on the kind of information to be collected
16 and how it is to be organized in completion of the
17 check sheet.

18 On page 413, this is sort of the summary
19 page for the checklist and it includes basic locational
20 information, formal name for the areas, reference to a
21 1:50,000 topographic map sheet and under slots 3 and 4
22 in the top reference to a geo code that John McNicol
23 spoke to yesterday.

24 We register our information
25 geographically the same way that John was talking about

1 with reference to wildlife information. So it's
2 positionally located by UTM grid and can be readily
3 retrieved as a result of that.

4 A map of the area at scales at 1:50 to
5 1:250,000 for larger sites, basic geographic and
6 administrative information opposite the map in boxes 6
7 through 15.

8 A general summary description of the site
9 in the area identified as box 19 and that generally
10 includes a description of the major land form features
11 for the area, along with the description of the
12 distinctive or characteristic vegetation patterns and
13 plant communities within the area.

14 You will notice following that a slot
15 identified No. 20 which indicates a series of
16 supplementary sheets to the check sheet, several of
17 which are mandatory and have been completed for most of
18 the areas that have been documented in the course of
19 the studies, at least for those areas which check
20 sheets were prepared.

21 On page 414 is the first of these
22 supplementary sheets entitled physical description,
23 provides a series of slots for information on the
24 bedrock geology and character of the area, the overall
25 physiography of the area, information on soils 27,

1 ground water 28, surface water 29, shores 30, climatic
2 disturbance history 32.

3 So basic physical information that would
4 be collected to primarily qualitative and incidental
5 observations in the course of site visiting an area.

6 On page 415 a sheet titled vegetation
7 summary which is a bit of an open format and provides a
8 spot to list the major communities that have been
9 identified within an area and characterize them through
10 the columns on the right in terms of some of the
11 important site paramaters for those specific
12 communities.

13 That information is not recorded in all
14 cases for all sites. But in the area of the
15 undertaking, for most of the sites for which check
16 sheets are prepared there is a summary such as this.

17 On page 416 an evaluation sheet and this
18 just provides, again, a bit of a free format to provide
19 commentary first of all on what some of the more
20 outstanding associations or features are within a
21 particular area.

22 Item 42, commentary on significant
23 species or features that were identified in the area.
24 And, again, these may be incidental, observational or
25 in limited casesthey may have voucher collections that

1 were taken for them which were later confirmed. Under
2 43, potential disturbances and threats, under 44 a
3 brief summary or abstract. And then finally a category
4 on recommendations.

5 The sheets following that, page 417,
6 community description was not completed for all sites,
7 in fact, was not completed for most sites in the course
8 of our studies because of the realities of resources
9 and time constraints we had to cut off largely at
10 completing the first four sheets of the check sheet.

11 Page 418, again, community composition
12 list wasn't completed. 419, sketch maps showing
13 physical features, vegetation features was compiled for
14 a number of sites and exists in reports or in filed
15 documentation. And 420, a final slot titled check list
16 of vascular plants.

17 You have noticed by now that we have
18 placed great reliance on capturing information on
19 vegetation and environment and that's because these are
20 readily available to record and they provide very good
21 indicators of environmental and habitat diversity.

22 So for that reason we do try and
23 emphasize the vegetative an floristic information or
24 plant information within these areas and usually there
25 is some type of a provisional check list of the

1 vascular plants that is compiled for these sites in
2 connection with the work that's undertaken.

3 Q. Thank you. Can you advise: Was an
4 environmental data card, that's the document -- the
5 sample that was on page 510, was an environmental data
6 card prepared for all life science areas that you
7 investigated?

8 A. Generally, yes. Certainly for all
9 sites for which we had some firm information to record,
10 be that information that had been taken from the
11 literature, some other source of documentation, or from
12 reliable interpretive work, there would or should be
13 that kind of record available.

14 Q. Was a check sheet done for every life
15 science area for which an environmental data card was
16 completed?

17 A. No. The surveys and selection
18 process really is a filtering or screening process and
19 the data card, if you will, is a fairly simple way of
20 simply categorizing basic information on the suite of
21 sites that were considered in the course of a regional
22 study.

23 That level of information, combined with
24 ongoing evaluation and consideration of the sites in
25 preparation for field work led to some of those sites

1 being dropped out at an early stage in the evaluation
2 of areas. And that could be for a number of reasons.
3 Based on the available information, it might be
4 determined that the site was so obviously in conflict
5 with other existing uses, legal commitments, there was
6 no point pursuing it.

7 More oftentimes it might be the fact
8 that, based on the information available, it was
9 clearly obvious that there were better examples of
10 other areas that provided far better representation,
11 perhaps better quality, condition, better ecological
12 integrity than some of these sites. So, for a variety
13 of reasons like this, sites were dropped off through
14 this widdling process.

15 The result was that you ended up with a
16 suite of fairly selected sites and those were the sites
17 in the main that were targeted for field survey and
18 evaluation and it is those sites that received
19 concentrated effort, concentrated work and were
20 documented on the check sheet.

21 In terms of numbers I would say that that
22 widdling process is quite substantial. If you go to a
23 number of the reports you would find that you might go
24 from something like one hundred or two hundred sites
25 that are documented, say, on data cards down to, for

1 example, maybe 25, 30, 40 check sheets. There is quite
2 a widdling process goes on there.

3 Q. In terms of data cards and check
4 sheets, were earth science areas dealt with in the same
5 way as the life science areas?

6 A. By and large again, yes, a very
7 parallel process. If you refer to page 509 and 510,
8 you will see that we have an example of a science check
9 sheet or checklist within the evidence package and,
10 again, there would be far more records documented on
11 data cards with far fewer records documented on check
12 sheets largely for the same reasons I cited.

13 THE CHAIRMAN: Mr. Freidin, I think it is
14 ten o'clock. I think we will take a mid-morning break
15 at this time. 20 minutes.

16 ---Recess taken at 10:00 a.m.

17 ---Upon resuming at 10:30 a.m.

18 THE CHAIRMAN: Thank you, ladies and
19 gentlemen. Be seated, please.

20 MR. FREIDIN: Q. Mr. Beechey, your
21 report refers to there being 40 system reports and
22 there is a reference to that at page 399.

23 Could you advise me whether there is any
24 relationship between those system reports and the
25 environmental data cards and inventory check sheets

1 that you have described?

2 MR. BEECHEY: A. Yes. The systems
3 reports to which you refer in fact are the technical
4 reports that were issued that report on the actual area
5 identification studies for any particular site region.

6 The reports provide a description, an
7 overall description of the character of that region, an
8 outline of the methodology that was undertaken in the
9 study, and also then include the documentation on the
10 specific candidate areas and sites that were documented
11 in the course of the study. So they then include both
12 the environmental data cards as well as the life
13 science check sheets that were compiled in the course
14 of a particular regional study.

15 Q. And as we turn to page 461 of the
16 witness statement, do we find there a list of those
17 system reports?

18 A. That's correct. I would point out
19 that regarding the area of the undertaking or the
20 region of the undertaking, I have already referred to
21 the fact that it generally corresponds with site
22 regions 3, 4 and 5. So with reference to that list, it
23 will be pretty easy to determine which system reports
24 relate specifically to the area of the undertaking.

25 Q. And do you have your document open at

1 page 461?

2 A. Yes, I do.

3 Q. The second heading -- or the heading
4 for the second column OFER. Could you indicate what
5 that refers to?

6 A. That's just an acronym for open file
7 ecological report and the numbers assigned under that
8 column are just chronological numbers comprised of the
9 first two digits referring to a year and the second two
10 digits referring to the number of report in a
11 particular year.

12 So SR7802, the first entry in the column
13 is a systems report completed in 1978 and it is the
14 second report in that particular year.

15 Q. Thank you. Could you advise: What
16 is done with the information collected and assembled
17 through the area identification studies?

18 A. Well, as I say, the information that
19 was collected was obviously driven by our own program
20 objectives in the first instance, so it was used
21 primarily to assess and select areas for consideration
22 as provincial parks and, subsequently, areas of natural
23 and scientific interest.

24 In addition to that, of course, I
25 referred to the fact that through the process we have

1 documented a good many sites over and above those that
2 have been protected ultimately in parks and ANSIs and,
3 as a result of that, there is a body of information
4 there reporting on important and significant features
5 in the landscape. That is one piece of information
6 that might be useful in timber management planning.

7 Q. And would I be correct that the areas
8 outside of the provincial parks would be the ones of
9 most interest when one is speaking of timber management
10 planning?

11 A. That's correct.

12 Q. And that's because -- and why is that
13 so?

14 A. Well, that would simply be because of
15 fact that the areas within provincial parks have been
16 secured by regulation under the Provincial Parks Act
17 and eventually through management plans that will be
18 completed for those parks, whereas the areas of natural
19 and scientific and, by definition, are excluded
20 technically from the area of the undertaking with the
21 exception of Lake Superior and Algonquin, as compared
22 to the areas of natural and scientific interest which
23 do fall in the area of the undertaking.

24 Q. Mr. Kennedy, can you advise how these
25 areas of natural and scientific interest and candidate

1 areas of natural and scientific interest are to be
2 dealt with in timber management planning?

3 MR. KENNEDY: A. Those areas could be
4 dealt with in the fashion that they would be considered
5 a values or features and they would be then input into
6 the area of concern planning process.

7 Q. Mr. Beechey, if a life science
8 feature or earth science feature is identified and
9 protected within a provincial park, or is designated as
10 an ANSI, how are such areas protected from any
11 potential detrimental effects of timber management?

12 A. Well, certainly again areas that are
13 designated within provincial parks are very securely
14 protected in terms of the management prescriptions that
15 are provided for them. Immediately, of course, they
16 are protected through withdrawal and regulation as a
17 provincial park for sure, so that puts a line around
18 them.

19 For the new parks that have come on
20 stream since 1983, we have developed a process for
21 developing interim management statements for those
22 areas which provide interim management direction
23 regarding the protection and management of important
24 features in them both from our point of view as well as
25 recreational and other perspectives until such time as

1 a formal management plan can be prepared for that
2 particular park.

3 The management planning itself would
4 provide even more definition, if you will, of the
5 resources and the delineation of zones within the park
6 that would provide for still better protection of the
7 features within the park.

8 On top of that, of course, the provincial
9 parks there is responsibility for things like
10 enforcement and control. So even over and above the
11 other considerations, there are those added types of
12 surveillance on those sites which would afford them
13 even greater protection.

14 Q. Thank you. In relation to areas of
15 natural and scientific interest, I understand that it
16 is contemplated - and I think perhaps you mentioned
17 this earlier in your evidence - that it is contemplated
18 that for each area there will be a management plan; am
19 I correct about that?

20 A. Yes, that's correct.

21 Q. And could you indicate what the
22 status of those plans is?

23 A. Maybe I can just say a little bit
24 about the process. In the overhead that I referred to
25 at the outset of my evidence, I made reference to the

1 implementation strategy for areas of natural and
2 scientific interest. That particular document does
3 outline a planning process for areas of natural and
4 scientific interest, that identify two levels of
5 management planning, if you will.

6 In the first instance the requirement for
7 a statement of interest to be prepared for each of the
8 areas once they have been designated through District
9 Land Use Guidelines. That statement of interest would
10 be an abbreviated prescription, if you will, not
11 dissimilar to the statements of interest, interim
12 management statements that we are preparing for
13 provincial parks and would provide interim direction on
14 protection needs and management for that area.

15 The second level of management planning
16 then, of course, would be a fuller-blown management
17 plan for a particular area of natural and scientific
18 interest and that would get into defining the values
19 that are in the area more completely leading to the
20 zoning and development of management prescriptions to
21 ensure that the identified values received the adequate
22 level of protection.

23 Q. And could you indicate then where you
24 are in that particular process and, in particular,
25 where are you in relation to the preparation of actual

1 management plans for areas of natural and scientific if
2 interest?

3 A. Well, at this point in time we have
4 no management plans in place for designated areas. The
5 process has emphasized the initial identification
6 selection and designation of sites. We would see this
7 as being a long-term need. On a need basis we will be
8 into developing plans for specific sites.

9 MR. FREIDIN: Mr. Chairman, I would like
10 to file at this time as an exhibit a document which in
11 fact was included as part of the witness statement. It
12 was provided separate from the witness statement
13 itself.

14 It is a document entitled:
15 Implementation Strategy, Areas of Natural and
16 Scientific Interest. (handed)

17 THE CHAIRMAN: Exhibit 325.

18 ---EXHIBIT NO. 325: Document entitled: Implementation
19 Strategy, Areas of Natural and
Scientific Interest.

20 THE CHAIRMAN: Are we supposed to have
21 that separately?

22 MR. FREIDIN: Yes, sir.

23 Q. Are you going to be referring to
24 this, Mr. Beechey?

25 MR. BEECHEY: A. I suppose I could in

1 reference to the management planning.

2 MR. FREIDIN: All right. Well, I just
3 wanted to know because -- if you are then I just wanted
4 to make sure that the Board has their copy

5 THE CHAIRMAN: Where is it?

6 MR. FREIDIN: It was a document which was
7 filed as part of the witness statement but filed
8 separately. So you would have received all of your
9 green books, plus you would have received your
10 catalogue that I saw Mr. Martel with in relation to
11 lands.

12 MR. MARTEL: I can't find it.

13 THE CHAIRMAN: This one?

14 MR. FREIDIN: No, no. It is called
15 Implementation Strategy, Areas of Natural and
16 Scientific Interest.

17 MR. MARTEL: I haven't seen that.

18 THE CHAIRMAN: I do not think we have got
19 it. I am afraid we do not have it.

20 MR. FREIDIN: I will just see whether we
21 have got some extra copies here. You don't want to see
22 mine because you won't be able to read it for the
23 scrawl. Mr. Campbell has indicated that the Board
24 could use his. (Handed)

25 It is clear that Mr. Campbell has not

1 read this document.

2 MR. CAMPBELL: That is what I get for
3 being a good guy. MNR last taken the advantage, in
4 previous hearings, to previously educate me on ANSI
5 matter, so I have concentrated on other things, Mr.
6 Freidin.

7 MR. FREIDIN: I thought you weren't
8 listening.

9 Q. Mr. Beechey, could you advise: What
10 effect will the management plans that you referred to,
11 the management plans for ANSIs, what effect will they
12 have on timber management operations once they are
13 actually produced?

14 MR. BEECHEY: A. With the document in
15 hand I would refer to pages 14 through 17. The effect
16 of the ANSI designation on timber management will vary
17 considerably throughout the area of the undertaking.

18 If you refer to page 14, if you have it,
19 it shows a hypothetical zoning framework that provides
20 sort of a generic guideline in dealing with the
21 delineation of important features within a particular
22 area of natural and scientific interest.

23 There are several categories of zones
24 referred to in the legend at the bottom: Core zone 1,
25 in brackets (managed) and, in that particular case, it

1 would mean -- that would be a category to include a
2 feature for which some type of management may be
3 required in order to perpetuate that feature.

4 Let's say for hypothetical purposes it
5 might be a fire-dependent ecosystem and at some point
6 in time in order to maintain a particular successional
7 stage or a particular type of community we may have to
8 entertain the idea of doing some kind of prescribed
9 burn in order to maintain that feature.

10 That is distinct from the second category
11 core zone 2 which is referred to as a strict zone where
12 we would be looking at purely evolutionary management
13 prescription if you will; i.e., we would not be
14 entertaining any type of hands-on management in that
15 particular kind of a zone.

16 The model then makes provision for what
17 is called a buffer zone or, in the terminology here, a
18 reserve which could be circumscribed around the most
19 critical features in which various kinds of modified
20 management might be allowed to occur depending, again,
21 on the sensitivity or the resilience of the features
22 that were designated in the core zones 1 and 2. And
23 then, of course, that sits within a broader resource
24 management zone as depicted.

25 These broad categories of zones can be

1 related on pages 16 and 17 where in sort of a matrix
2 format we lay out some broad generic guidelines
3 regarding a range of activities that might be or might
4 not be permitted to occur within a particular feature
5 per zone. And these have to be, to a degree, flexible:
6 they cannot be cookie cutter, because the requirements
7 for protecting any number of features will vary both
8 with the situation and the nature of the feature.

9 So when you look at the table you will
10 see -- if you look at page 16 Management Guidelines for
11 Life Science ANSIs by Zone, if you look down to the
12 fourth category forestry, selective logging, under the
13 first column core zone, under a strictly protected core
14 zone there would be no logging by this prescription.

15 Under a managed core zone there could
16 well be some kind of cutting or silvicultural
17 management where that may be required to enhance or
18 perpetuate a feature that that area was intended to
19 protect. And as you go across in the other columns
20 then in the buffer or the reserve or the resource
21 management zone or access zone, where they might be
22 designated, generally the prescriptions become laxer.

23 So from that example you can get some
24 indication of how forestry may or may not be affected
25 by the designation of an area of natural and scientific

1 interest and a management prescription that is in
2 conformity with these guidelines. .

3 Q. Thank you. Your report, Mr. Beechey,
4 refers to ecological area reports which is the product
5 of a second level of ecological surveys. Mr.
6 Davidson's report refers to geological area reports and
7 I understand that you will not be referring to these
8 reports in your oral evidence; is that correct?

9 A. That's correct.

10 Q. And could you indicate why not?

11 A. I think I have referred earlier to
12 the fact that we do have a second tier of technical
13 report as referred to here which gathers more detailed
14 information based on more intensive field survey of
15 specific areas. You are correct that the evidence
16 package between pages 437 and 460 provide a
17 comprehensive listing of some 250 or 260 ecological
18 reports that have been completed.

19 In fact, by far, the majority of these
20 are in provincial parks and are not of relevance to the
21 timber EA at this point in time. The few recent
22 reports that have been completed in areas of natural
23 and scientific interest, all fall within ANSIs that
24 occur in southern Ontario, outside of the area of the
25 undertaking.

1 MRS. KOVEN: Excuse me. You said several
2 times, Mr. Beechey, that the location of ANSIs inside
3 provincial parks shouldn't concern us because right now
4 you feel they are protected from timber activities.
5 Notwithstanding, what are the two parks where timber
6 activity are allowed?

7 MR. BEECHEY: Lake Superior and
8 Algonquin.

9 MRS. KOVEN: That's right. But certainly
10 in the future we would have to consider the fact that
11 there would be harvesting, cutting permitted in
12 provincial parks.

13 MR. BEECHEY: No, that is not the case at
14 all. The policy announced by the Minister on May 17th
15 has reaffirmed the direction that there will be no
16 timber harvesting in provincial parks with the
17 exception of Algonquin and Lake Superior.

18 MRS. KOVEN: And no other exceptions?

19 MR. BEECHEY: That's right.

20 MRS. KOVEN: Ever?

21 MR. BEECHEY: Ever. As long as I am in.

22 MR. FREIDIN: Q. And Mrs. Koven, I think
23 when she asked you the question referred to ANSIs in
24 provincial parks.

25 MR. BEECHEY: A. Yes, a point of

1 clarification there. In fact, as I tried to point out
2 earlier, these are two quite distinct streams and quite
3 distinct mechanisms. Provincial parks are areas that
4 are regulated under the Provincial Parks Act.

5 We do recognize ANSIs within provincial
6 parks. Those areas are cared for through the park
7 classification and the park zone system. So that areas
8 that would be of provincial significance from an
9 ecological or a geological point of view would
10 automatically be designated under park classification
11 system and treated through the zoning system perhaps as
12 a nature reserve.

13 MRS. KOVEN: I guess my impression, it
14 could be, is that an ANSI located inside a provincial
15 park in fact was afforded greater protection than an
16 ANSI outside a provincial park?

17 Do you think that is a correct statement?

18 MR. FREIDIN: I just -- I am sorry, just
19 answer the question.

20 MR. BEECHEY: Insofar as the Provincial
21 Parks Act provides a statutory basis for those
22 designations and the ANSI policy is a Cabinet policy, I
23 suppose there is a hierarchy there if you will, so that
24 in a legal sense I guess one could say: Yes, that
25 provincial parks are afforded stricter protection for

1 that reason.

2 We like to think of it though in terms of
3 protection in the management sense and the manner in
4 which the guidelines that I have referred to here can
5 care for sites within areas of natural and scientific
6 interest versus provincial parks on quite an equivalent
7 basis I think.

8 MR. MARTEL: But you protect areas within
9 parks as well but under a different act; is that what
10 you are saying?

11 MR. BEECHEY: It is under the Provincial
12 Parks Act.

13 MR. MARTEL: Because you have specific
14 sites that you want to preserve--

15 MR. BEECHEY: That's right.

16 MR. MARTEL: --to establish parks around
17 them?

18 MR. BEECHEY: That's right.

19 MR. MARTEL: The ANSIs are too small, I
20 think is what you are saying; isn't it?

21 MR. BEECHEY: No, that is not the point.

22 MR. MARTEL: At least in size.

23 MR. BEECHEY: No, that is not the point.

24 A lot of ANSIs are large in size, it is not a size
25 distinction at all. Provincial parks basically are

1 protected under the Parks Act and I guess in an ideal
2 world we would like to see more ANSIs established as
3 provincial parks.

4 The reality of it is, as we have come
5 through the district land use planning, is that there
6 are conflicts, other commitments on the on the land
7 base so that the rigor, the level of protection, if you
8 will, that would be afforded through the park
9 classification and zoning system just isn't realistic
10 for some of these other sites.

11 So, in that sense, the ANSI designation
12 and the management is custom tailored perhaps to be a
13 little bit more flexible to afford whatever protection
14 is necessary, while at the same time, perhaps
15 accommodating some other uses that aren't permitted in
16 provincial parks.

17 THE CHAIRMAN: Mr. Beechey, you mentioned
18 in response to Mrs. Koven's question that timber
19 activities were only allowed in Lake Superior Park and
20 Algonquin.

21 MR. BEECHEY: Yes.

22 THE CHAIRMAN: What is the controversy
23 all about in terms of the Lady Evelyn Smooth Water Park
24 and was not the decision recently that timber
25 management activities can, in that park, co-exist with

1 the concept of a wilderness park?

2 MR. BEECHEY: That is not my
3 understanding.

4 MR. FREIDIN: Perhaps Mr. Clark could
5 deal with that issue

6 MR. CLARK: The situation in the Lady
7 Evelyn Smooth Water is somewhat different. At the time
8 we were involved in strategic land use planning in the
9 district in the development of District Land Use
10 Guidelines, but particularly the time when we were
11 going through the identification and evaluation of new
12 park areas, one of the areas we looked at was -- for a
13 potential wilderness park, was in the area of the Lady
14 Evelyn Smooth Water area, north and slightly west of
15 Temagami.

16 And, in that process, we looked at a
17 whole range of park options and, in doing so, we tried
18 to evaluate the potential impacts on a variety of users
19 including, of course, the forest industry, the mining
20 industry, there were implications as far as native
21 people went.

22 And in that process we looked at a number
23 of planning options and, in fact, went through what we
24 call a socio-economic impact analysis which we made
25 available at the open houses and the results of which

1 were included at open houses during the time that the
2 District Land Use Guidelines for Temagami -- the open
3 houses for those guidelines were being reviewed.

4 As a result of that process, we
5 identified a park area which was approved and is now in
6 regulation which I believe is about 76,000 hectares.
7 There is no logging in that park. One of the
8 provisions, however, that was made was that a road
9 which had existed prior to the designation of the park
10 that ran through the park, would be made available to
11 one of the logging companies because, in order to
12 offset the loss of timber that occurred in the park
13 area as a result of its designation, they required
14 access to wood south of the park and the only means of
15 getting to that wood, that was reasonably cost
16 effective, was through the use of this road.

17 In effect, that was a compromise that was
18 made at the time. The issue that arose subsequently
19 had to do with the possible linking of that road that
20 was - the Liskeard lumber road as it was called - that
21 ran from Elk Lake south through the park area and could
22 possibly link up with the Red Squirrel Road which I am
23 sure you have heard of and that gave rise to a whole
24 range of issues that related to the adequacy of that
25 particular park in terms of representing the

1 recreational and earth and life science diversity of
2 that part of the province and the issue has focused to
3 a large extent on whether or not adequate protection is
4 afforded outside the park area and/or perhaps whether
5 the park area -- the boundaries of the park are
6 adequate as they currently stand.

7 But I guess the point I would emphasize
8 right now is that there is no logging in that
9 particular area.

10 THE CHAIRMAN: Thank you. That certainly
11 clarifies it.

12 MR. FREIDIN: And, if I could...

13 MR. MARTEL: Is that the road that --
14 what creates the problem then, the road through the
15 park itself? Because wildnerness parks aren't supposed
16 to have roads.

17 MR. CLARK: Yes. I mention that because
18 I think it is important to do so. At the time that we
19 identified that as a park area, one of the conditions
20 on which it was approved was that in order to offset
21 the significant losses to logging interest -- companies
22 in the area that were dependent on wood supplies in the
23 area, that road would be retained.

24 The issue that developed subsequently had
25 to do with the development of the Red Squirrel Road and

1 the concerns that many of the interest groups had was
2 that those two roads would link and then create a
3 thoroughfare through the park area and --

4 MR. MARTEL: Is that much like the
5 concern then at Killarney -- from Killarney to
6 Espanola?

7 MR. CLARK: Very much the same situation.

8 MR. FREIDIN: Q. Just while we are
9 speaking of the road, Mr. Clark, there is one question.
10 Are you aware whether there has been any commitment by
11 the government to phase out the use of that road which
12 is going through the park?

13 MR. CLARK: A. I am hesitant to speak on
14 that issue right now because frankly I have been rather
15 preoccupied by the issue at hand here.

16 Q. Thank you.

17 A. That is certainly an answer we can
18 get for you, if you would like it. I apologize for...

19 THE CHAIRMAN: Well, I do not know
20 whether that whole controversy will become an issue in
21 this hearing at some place down the road or not, but we
22 will be moving the hearing that away at some future
23 date and if it is still boiling over at that time, I am
24 sure we will probably hear about it again.

25 MR. FREIDIN: I think perhaps I could

1 just end this little discussion by indicating that such
2 a commitment has been made.

3 Q. Now, Mr. Beechey, before I sort of --
4 just one moment here I have got to find out where I am.
5 Before we go on to the next series of questions, I want
6 to just go back --

7 THE CHAIRMAN: Excuse me, Mr. Freidin,
8 Ms. Swenarchuk has...

9 MS. SWENARCHUK: With regard to the Red
10 Squirrel Road and the whole Temagami question, can I
11 just point out that if Mr. Freidin chooses to lead
12 evidence regarding a particular element of the on-going
13 controversy in the area, you know, the question of
14 whether or not the government has agreed to phase out
15 the road, some of us will feel obliged to move into all
16 the other elements.

17 THE CHAIRMAN: Okay. Well, let me--

18 MS. SWENARCHUK: That is only one small
19 element of the past.

20 THE CHAIRMAN: --head you off at the pass
21 at this point by saying that I do not think it is
22 really significant one way or the other for the
23 purposes of what we are dealing with now as to whether
24 a commitment such that Mr. Freidin has just alluded to
25 has or has not been made.

1 Really I think the Board, at least this
2 member of the Board, was concerned over the statements
3 made by Mr. Beechey, that there appeared to be only
4 logging in two parks Lake Superior and Algonquin when
5 erroneously I was under the impression that there might
6 also be logging within the Lady Evelyn Smooth Water
7 Park. That was basically the clarification that I
8 sought.

9 And it obviously got into the Temagami
10 question in a peripheral way, but I do not think at
11 this stage we are going to open up those issues for the
12 purposes of this hearing. Whether or or not they
13 become an issue at some future date in this hearing,
14 will remain to be seen.

15 MR. FREIDIN: Q. Now, Mr. Beechey,
16 before we go on with the questioning, I want to just
17 address one matter which I think is very important and
18 which I think we should be sure that everybody is using
19 the same language.

20 Some of the questioning which has just
21 occurred has referred to ANSIs in provincial parks.
22 Now, I understand that these life science and earth
23 science features which are identified and are protected
24 because they are within a provincial park are not
25 called areas of natural and scientific interest; is

1 that correct?

2 MR. BEECHEY: A. That's correct.

3 Q. But if one of those features is
4 identified does not have protection because it is
5 within a park, in order to protect that feature outside
6 the park, the Ministry or the Government has in fact
7 created the program of and created the name, areas of
8 natural and scientific interest in order to protect
9 those areas -- those features outside of provincial
10 parks?

11 A. That's correct.

12 MRS. KOVEN: Did you say there are no
13 ANSIs outside of provincial parks in the area of the
14 undertaking?

15 MR. BEECHEY: No, I did not. As I
16 referred to the maps this morning, I believe there is -
17 I may not have the count accurate - if memory serves
18 me, there are 89 sites of areas of natural and
19 scientific interest designated within the area of the
20 undertaking.

21 MRS. KOVEN: Thank you.

22 MR. FREIDIN: Q. And by designated, am I
23 correct that that means that you can refer to it as an
24 area of natural and scientific interest?

25 MR. BEECHEY: A. That's correct.

1 Q. And in the area of the undertaking,
2 am I correct that there are also areas which although
3 they have not been referred to in District Land Use
4 Guidelines -- well, rather than have me do this, could
5 you indicate then: Are there things in the area of the
6 undertaking called candidate areas of natural and
7 scientific interest?

8 A. Yes. Perhaps I didn't give that
9 enough attention when we reviewed the maps at the back
10 back here this morning.

11 In fact there are a whole suite of areas
12 being considered for designation as areas of natural
13 and scientific interest through the District Land Use
14 Guidelines process. In fact I believe the count is
15 probably in the order of 100 plus - again I can check
16 that - areas that occur in northern Ontario, and I
17 don't know the exact figure, that fall within the area
18 of the undertaking, but there are a substantial number
19 that are being considered as proposals for designation.

20 Q. And one follow-up point, going back
21 to Mr. Kennedy. Is it the intention that timber
22 management planning will deal with the issue of
23 protection of designated areas of natural and
24 scientific interest and those candidate areas in the
25 same fashion?

1 MR. KENNEDY: A. Yes, it is.

2 Q. And you indicated in your evidence
3 that that would be through the area of concern planning
4 process which we will discuss in much more detail in
5 Panel No. 15.

6 A. That's correct.

7 Q. Thank you.

8 MRS. KOVEN: Could I ask you, Mr.

9 Beechey: Is it too difficult for you to say, of the 89
10 ANSIs in the area of the undertaking, which of those
11 might be so remote or so isolated from possible timber
12 activities that they simply are almost in a class by
13 themselves?

14 I guess I am interested in knowing: Is
15 the situation of ANSIs such that most of the ANSIs are
16 located in forests or are many of them just so
17 obviously not going to be touched by timber operations?

18 MR. BEECHEY: Well, there is the total
19 mix of environments, for sure. Some of them are
20 forested, some are fairly large, some are fairly small.
21 I couldn't give you an exact count or an acreage
22 figure, if you will, right here as to the total number
23 of them, that would have productive forest site on
24 them, but I suppose we could derive an estimate.

25 MRS. KOVEN: I didn't want to be that

1 precise, I was only interested in knowing if you can
2 say: Yes, there are a number of ANSI sites that would
3 just be eliminated because they simply aren't feasible
4 for any sort of timber operation?

5 MR. BEECHEY: There would be some I am
6 sure. Some of the bedrock sites, for example, that I
7 referred to this morning would occur obviously on
8 non-productive sites, they would be barren of any
9 soils, there would be exposures of one kind or another
10 and those wouldn't even be at issue with respect to any
11 conflict with timber management in most cases unless,
12 for example, there was a situation where perhaps one of
13 them had been designated perhaps to protect a sensitive
14 fossil locality or something that might be impacted by
15 activities related to forestry, then there could be
16 concern there. But by and large, not on sites like
17 that.

18 MR. FREIDIN: Q. If we could just turn
19 for one moment to page 437 of the witness statement.
20 You have indicated that from page 438 to 459 we have a
21 listing of the area reports; is that correct?

22 MR. BEECHEY: A. That's correct.

23 Q. And is this a list of both -- I am
24 sorry -- does this list also include system reports?

25 A. Yes, it does, at the end of the list.

1 We have referred to the page numbers earlier. I should
2 say there is a summary listing of the systems reports
3 on --

4 Q. Page 461.

5 A. You have got it. That's correct.

6 Q. All right. I just have a note here
7 that somewhere there were numbers which had a prefix SR
8 and all I wanted to was just indicate to the Board that
9 the SR meant system reports.

10 MR. FREIDIN: Perhaps rather than a
11 question, I could just indicate to the Board that if
12 you are going through one of these listing of reports,
13 if it says SR that means systems report which is done
14 through area identification studies as opposed to area
15 reports which come out as a result of the second phase
16 that Mr. Beechey said took place, but we are not going
17 to discuss here.

18 Q. There is reference to the storage of
19 information attained through this particular program at
20 page 403 and I am just wondering whether you could
21 comment generally on the retrievability of information
22 compiled through the area identification studies?

23 MR. BEECHEY: A. Well, as the catalogue
24 indicates, that we have been discussing, the reports
25 have been indexed and organized chronologically into a

1 report series. A complete set of those reports resides
2 in Toronto in our office where it serves sort of a
3 strategic function and an archival function.

4 In addition to that, copies of all the
5 reports that are of relevance to any particular
6 administrative region would be in those regional
7 offices. On top of that, the district would have
8 access to those reports as well. In addition to that,
9 in addition to the actual bound reports as I referred
10 to earlier, there is an awful lot of other information
11 that is gathered in the compilation of these studies.

12 A lot of that information has been
13 consolidated in main office files and organized on a
14 site basis by map sheet and UTM geocode. So I am
15 thinking now of things like aerial photographs,
16 background mapping of one kind or another and slides,
17 for example, photographic coverage, records of
18 collections, things like that, incidental information
19 that has been collected in the course of the survey,
20 that too is organized and indexed both centrally for
21 the province, as well as at a regional level.

22 There are other kinds of information that
23 are collected in connection with the studies,
24 sometimes. I made reference earlier, you know, on some
25 occasions voucher collections being made of vascular

1 plants to confirm field determinations. Those kinds of
2 collections ultimately are deposited with institutions
3 that have the facilities to care for those kinds of
4 collections: The National Museum, The Royal Ontario
5 Museum, University Herbaria.

6 Those records of accessible because of
7 accessioning procedures that institutions like that
8 have, so anybody who really wants to get at those
9 records for one reason or another can do so, but on a
10 day-to-day basis, that level of information usually
11 isn't required because the general reference to it is
12 included in the body of the report or the check sheets
13 contained in the reports.

14 Q. Mr. Beechey, could you refer to
15 Exhibit 281 which is the Interrogatory No. 45 submitted
16 by Venture Tourism?

17 Do you have a copy of that?

18 A. Yes, I do.

19 Q. Could you indicate -- well, the
20 question which was asked was asked in relation to earth
21 science features and states:

22 "Please show any consideration given to
23 protecting more than just..."

24 And this is from Mr. Davidson's paper, I
25 believe:

1 "...the best insitue examples of
2 features' so that if one protected
3 site is destroyed by a local disaster
4 other sites with the same type of
5 features survive."

6 Could you outline, in a general way, the
7 response to that particular question?

8 A. Well, it is a very good concern, and
9 it is one that we are cognizant of. I have tried to
10 indicate, I believe, through presentation that in the
11 first instance our efforts are a bit of a collector's
12 approach. So we certainly are trying to make sure that
13 we represent one fine example at least of the various
14 features that we have classified for representation in
15 parks and in areas of natural and scientific interest.

16 As was responded to in this particular
17 interrogatory, generally these features do not occur in
18 isolation in the landscape one from another and the
19 selection of an area to represent one or several
20 features or a diversity of features automatically
21 provides for some level of duplication of a number of
22 features.

23 This will be particularly so for
24 geological features which occur sort of in a layer cake
25 fashion, so that you might select an area to represent

1 a certain exposure of a certain geological feature and
2 also include at the same time associated bedrock
3 features that lie next to that exposure.

4 With reference to life science features,
5 and this wasn't directed at that, the same phenomena
6 occurs. Because of the approach that we have taken,
7 giving priority to represent the major landscape units
8 as we have defined them, we certainly do provide for
9 some level of duplication at lower levels in the
10 system. By representing a landscape feature or several
11 landscape features, we probably represent a number of
12 times certain kinds of communities and certainly
13 occurrences of any particular plant or animal.

14 Q. Just the last series of questions,
15 Mr. Beechey. You indicated in your earlier evidence
16 that except for Algonquin Park and Lake Superior
17 Provincial Park, logging and timber management
18 activities don't occur within those parks.

19 Can you indicate that in those two parks
20 where logging is permitted, are the features that you
21 have been referring to which you want to protect, are
22 they protected from potential detrimental effects of
23 timber management and, if so, how?

24 MR. BEECHEY: A. Very much so. I made
25 reference this morning using an example from Lake

1 Superior, one of the parks in question, where I was
2 talking about the representation of an important
3 landscape unit within one site district. Within Lake
4 Superior Provincial Park that particular feature is
5 quite well protected in a series of nature reserves and
6 several wilderness zones that have been designated in
7 the park through an official management plan.

8 The same holds true for Algonquin
9 Provincial Park where logging activities are controlled
10 very carefully and undertaken in conformity with a
11 management plan for the park.

12 In the case of Algonquin there is a
13 fairly comprehensive system of nature reserves, some 70
14 altogether, some of which are quite substantial zones
15 30 square miles and greater in size, supplemented by
16 several large wilderness zones and, together, these
17 two zones which exclude timber activity contain a very
18 good cross-section of the features in the park that we
19 are concerned with protecting and representing.

20 Q. Now, the zone of the park where
21 logging activities are permitted, is there a name for
22 that zone?

23 A. In the case of Algonquin, yes,
24 recreational utilization zone.

25 Q. And, Mr. Clark, in earlier evidence

1 there was reference to a the recent creation of a
2 number of provincial parks. I think in the statement
3 of the Minister of Natural Resources in May of this
4 year and that statement of the Minister indicated that
5 "timber management activities in provincial parks would
6 be subject to strict control.

7 And in the evidence reference was made to
8 the need for timber management plans to comply with
9 park master plans. I am just wondering whether you can
10 expand on or explain the relationship between park
11 master plans and a timber management plan?

12 MR. CLARK: A. Yes. As Mr. Beechey
13 pointed out, the two parks where this occurs are Lake
14 Superior and Algonquin. The park master plans for
15 those two parks provide a context of framework within
16 which timber management planning and timber management
17 activities occur.

18 It may be a little bit helpful just to
19 elaborate on that. In these two parks commercial
20 harvesting of timber occurred prior to their
21 designation. So that at the time that management
22 planning was undertaken for these two parks, the major
23 issue that was dealt with in that process was the
24 extent and duration of commercial harvesting of timber
25 in the parks themselves. And in an effort to reach a

1 reasonable accommodation that provided for the
2 protection of significant park values on the one hand
3 and allowed for the maintenance of an adequate supply
4 of timber to wood-using facilities in the vicinity that
5 were dependent on those areas, the park planning
6 exercise went through a process that involved, first of
7 all, identifying significant earth science, life
8 science, historical and archaeological resources and
9 then Mr. Beechey, for example, was involved in one of
10 the earth -- original life science surveys in Lake
11 Superior Park.

12 And, on the other hand, we looked very
13 closely at the wood supply requirement of the
14 industries in the areas. The net result of a fairly
15 lengthy process was the identification of a final
16 planning option, and this was after the review of many
17 in both cases, that identified and protected a series
18 of earth/life science, historical and archaeological
19 and recreational resources in the park through a series
20 of wilderness, natural environment, nature reserve,
21 access and recreation development zones.

22 For example, in Lake Superior Park,
23 approximately 50 per cent of the park fell into those
24 various zones so that you had significant landscape
25 units and, in addition to that, you had a series of

1 smaller but significant earth and life science and
2 archaeological or historical resources.

3 The balance of the area of the park was
4 then designated as a recreational utilization zone in
5 which timber management activities would be permitted
6 in conjunction with recreational use of the land.

7 Now, it is that area for which a timber
8 management plan is done in those parks. And,
9 essentially, the same rules apply in timber management
10 for those areas as would apply for Crown land outside
11 the park area.

12 One important thing to understand is that
13 park management plans are reviewed periodically and, in
14 the course of that review, the adequacy of the
15 representation and, in effect, the zoning system is
16 reviewed and significant changes that could result from
17 that kind of a review could ultimately result in
18 amendments to timber management plans.

19 Now, I point that out to demonstrate what
20 the relationship is between the two plans, the plan --
21 the park management plan provides a context within
22 which timber management occurs.

23 Q. Can you advise me, can the provision
24 of a timber management plan in that recreational
25 utilization zone have provisions in it which are

1 inconsistent with the park master plan provisions for
2 those areas?

3 A. I am not sure I understand, Mr.
4 Freidin.

5 Q. All right. Do the park management
6 plans indicate what the objectives are or what the use
7 is to be in those recreational utilization zones?

8 A. Yes.

9 Q. Can a timber management plan have a
10 provision in it which will be in conflict with--

11 A. No.

12 Q. --the provision in the park master
13 plan?

14 A. No.

15 Q. Thank you. Those are my questions of
16 the panel in relation to this particular subject
17 matter.

18 MR. FREIDIN: Mr. Chairman, Mr. Kennedy is
19 the next witness. He has a fairly large array of maps
20 that are going to be used. He has advised me that it
21 will probably take him in the neighborhood of 15
22 minutes to set those things up and to see whether we
23 can move the tables back, because he will be the last
24 witness for the day so that there will be easier access
25 to the maps.

1 So I guess what I am leading up to is a
2 request for an adjournment long enough for us to in
3 fact set up the room.

4 THE CHAIRMAN: How long are we going to
5 be with Mr. Kennedy after we come back?

6 MR. FREIDIN: We will not finish Mr.
7 Kennedy today.

8 THE CHAIRMAN: Okay. And if we break now
9 for say 15 or 20 minutes, would it be acceptable to
10 come back, not break for lunch, and end the day
11 somewhere around two o'clock?

12 MR. FREIDIN: Well, if Mr. Kennedy is up
13 to it, I am up to it. I would want to get as much of
14 Mr. Kennedy's evidence in today as possible. So how
15 are you doing, Frank?

16 MR. KENNEDY: Quite well, thank you. If
17 we can extend that to perhaps 20 minutes it would be
18 advantageous.

19 MR. FREIDIN: Mr. Chairman?

20 THE CHAIRMAN: The other suggestion from
21 Mr. Martel is, is that perhaps we break now for 45
22 minutes, somebody who wants to grab a quick sandwich
23 might be able to do so, and then we'll come back and go
24 through until two.

25 MR. FREIDIN: I was going to suggest 38

1 minutes, come back at noon, but...

2 THE CHAIRMAN: I do not know if you will
3 get out of downstairs in 38 minutes.

4 MR. FREIDIN: So we are adjourned then
5 until --

6 THE CHAIRMAN: Why don't we adjourn until
7 a quarter after twelve.

8 MR. FREIDIN: Okay.

9 THE CHAIRMAN: And then we will go from
10 there.

11 ---Luncheon recess taken 11:25 a.m.

12 ---Upon resuming at 12:15 p.m.

13 THE CHAIRMAN: Thank you. Be seated,
14 please.

15 Mr. Freidin, I understand from Mr. Mander
16 that that document that you referred me to we have but
17 it is not in bound form.

18 MR. FREIDIN: We won't get to it today.
19 I don't think we will get to it.

20 THE CHAIRMAN: Very well.

21 MR. FREIDIN: Q. Now, Mr. Kennedy, I
22 would like you to take a deep breath and sit back for
23 a second and pretend that you are on a site visit.

24 Mr. Kennedy, can you tell us what we are
25 going to talk about today and perhaps part of Monday

1 about?

2 MR. KENNEDY: A. We are going to be
3 talking about the terrestrial environment database.

4 Q. What is that?

5 A. Simply put, I would describe it as
6 the information we have available to us that relates to
7 trees and soils.

8 Q. Could you review the sections of the
9 report that you authored and describe briefly the
10 subject matter of each section and also indicate
11 briefly why that subject matter is important to timber
12 management?

13 A. Okay. If you refer to the table of
14 contents on page 105 of the statement of evidence.

15 MR. FREIDIN: Can you hold on just one
16 moment, please.

17 Q. Okay. Sorry, Mr. Kennedy, if you
18 could just continue.

19 MR. KENNEDY: A. I would just indicate
20 that in the -- first to give an overview of the type of
21 information that is contained in each one of the
22 sections, starting off with Section 1 about databases,
23 is an indication of some of the mapped information and
24 the use of aerial photographs and their importance in
25 resource management and how they are used.

1 The access section deals with existing
2 road access and where those roads can be found.
3 Obviously another important aspect necessary for timber
4 management.

5 Section 3 and 4 deals with tree
6 information, where they are, how much you have of them
7 and that's also important of course for timber
8 management.

9 Section 5 deals with the soils
10 information. Section 6 and 7 deal with more
11 tree-related information, primarily that of younger
12 trees. And Section 8 deals with insects and disease
13 that may exert pressures on the tree resources.

14 And Section 9 and 10 are a glimpse at
15 some of the recordkeeping that we use in conjunction
16 with the terrestrial environment.

17 Q. Now, is there any particular reason
18 that you chose those particular subject matters?

19 A. I chose those as they give a range of
20 the -- an idea of the range of information we have
21 available to us in terrestrial base, and it gives a
22 sample of some of the information available to us
23 that's produced both externally from the management
24 unit, which is the focus of the panel and it also gives
25 a variety of information that's produced and collected

1 in-house at the management unit level.

2 Q. What about the information about
3 other values. Do you not need that information as
4 well?

5 A. Well, yes, you do. This information
6 that I have listed here in the document is forest
7 specific, the other values information is essential to
8 have. For the purposes of this paper we have left it
9 out primarily because the structure of the panel is
10 such that we have representation on Panel 7 from the
11 other program groups and evidence has been heard from
12 those people.

13 Q. Okay. Could you indicate to the
14 Board how you are going to approach your evidence or
15 how in fact it is going to be structured?

16 A. Okay. With some deviation, I am
17 going to be following the table of contents and it will
18 make it a little easir to follow through.

19 I am going to be grouping some of the
20 information, for instance No. 1 and 2, both sections
21 there, we will be talking about those together and all
22 of Section 5 will be dealt with as one package.

23 Then we will follow through with the
24 other sections more or less in the order that they are
25 listed in the table of contents.

1 Q. Okay.

2 A. The way in which I would lilke to
3 tackle it is to give kind of an overview of the
4 information that is in the witness statement as well as
5 some of the supporting documents, in fact almost
6 perform a scoping exercise in that we'll be talking of
7 the highlighting of some of the information that is in
8 here and directing the Board to the attention of
9 several pages of the references that have been appended
10 to draw their attention to how that information is used
11 as opposed to going through the details of each and
12 every one of the documents.

13 THE CHAIRMAN: Well, the Board will be
14 following your scoping exercise with some interest.

15 MR. KENNEDY: Also, Mr. Chairman, I can
16 advise you that there are several sections that we will
17 will not be leading evidence-in-chief on in that we
18 feel that there is adequate evidence before the Board
19 from previous panels.

20 THE CHAIRMAN: We will be more than
21 interested in that part.

22 MR. FREIDIN: We had to fight over who
23 was going to say that, but I'm going to get my licks in
24 later.

25 Q. So, Mr. Kennedy, if you wanted to

1 give that overview -- or turn to the first area that
2 you want to deal with.

3 MR. KENNEDY: A. Okay. I would like to
4 get up and do a little song and dance routine around
5 some of these maps that I have behind me and if you are
6 following along in the witness statement, that would
7 relate to pages 107 through to page 111.

8 And the way in which I have preferred to
9 deal with this is to put yourself in the position of
10 being a new individual arriving at a management unit
11 and you are wanting to find out some information about
12 the terrestrial environment and the way in which I
13 would structure this is that it's important to have
14 that information and the ways in which that information
15 can be obtained is primarily -- or I would suggest that
16 the best way that information can be obtained is by
17 being there, being on the site.

18 And if it is not possible to be there on
19 the site, I think the next best thing is to have an
20 opportunity to fly over an area and see it firsthand
21 from the air and make some interpretations. And where
22 that isn't possible I have found that the next best
23 method of gathering the information is to have a look
24 at aerial photographs and use the basis of your
25 education and experience to derive some information

1 about that.

2 And in the absence of aerial photographs,
3 if you are looking for particular features or indeed if
4 you are looking for a broader picture, quite often
5 referring to maps is quite beneficial. And, as a
6 result, we have got a collection of maps and at least
7 one photograph shown in the witness statement and some
8 of these maps have been filed separately.

9 I would like to walk through some of the
10 features that you would see on a selection of maps that
11 we have included here.

12 Q. And I understand you think it would
13 be useful for the Board actually to come down and be
14 close enough to the map so they can follow your
15 evidence?

16 A. Yes, I think it would. Also I would
17 suggest that I mark some of the features as we go
18 through right on the map so that a person looking at
19 the transcript later would be able to follow along with
20 those features.

21 Q. Okay. So perhaps any members of the
22 public or counsel that want to avail themselves of
23 looking at the maps, I would they go up there and find
24 a spot.

25 A. Okay. This first map that I am

1 referring to is a topographical map.

2 THE CHAIRMAN: Exhibit 326.

3 ---EXHIBIT NO. 326: Topographical map of Dryden,
4 Ontario, No. 52F.

5 MR. KENNEDY: And this map is produced by
6 the Energy, Mines and Resources people, it is a federal
7 series map. And the map is at a scale of 1:250,000
8 and I am just drawing a line around that scale so
9 people can follow it later.

10 The particular title on this map is
11 Dryden, Ontario and it has a reference number of Dryden
12 52F in the national topographic series.

13 One of the more important pieces of
14 information that is found on topographical maps is an
15 indication of the topographical features and by that
16 the main feature would be the contour lines which is an
17 indication of the elevation information that's
18 available on the map.

19 In this particular scale of map the
20 contour interval is 40 metres which is indicated right
21 on the map. Elevations on the map are found --

22 MR. FREIDIN: Q. Just before you go onto
23 elevations, can you indicate what the contour elevation
24 interval is on that map?

25 MR. KENNEDY: A. On this one it's 40

1 metres.

2 Q. Is that a usual interval for
3 contours?

4 A. It is a usual interval for maps at
5 this scale. Other contour interval are available on
6 different scale topographic maps.

7 Q. Are you able to tell by looking at
8 that map what the lie of the land is between the
9 contour lines?

10 A. Yes. One of the uses of the contour
11 information is to be able to tell, in some sense, the
12 slope. If you are looking at the contour lines, the
13 closer the contour lines the steeper the slope is. So
14 in that regard by studying the map and the distance
15 between the individual contours lines you could tell
16 some information about the general slope of the land.

17 Q. It would be a general idea -- I
18 understand there is no specific information that tells
19 you what the lie of the land is between the specific
20 information, whether it goes up or down?

21 A. You are correct, there is no other
22 information that is specific, other than point source
23 elevations.

24 Q. Thank you.

25 A. In regards to point source

1 elevations, it is common on topographical maps to see
2 point elevations both for land features and also for
3 water bodies.

4 One of the contour lines that I thought
5 would be interesting to point out on the map is the one
6 that's around the Dryden municipal airport and I will
7 just draw a line around that.

8 The Dryden municipal airport is on the
9 top of a land form features and quite a prominent
10 feature, it is a very sandy plane and flat. It is at
11 the top of a 400-metre contour interval. And the
12 placement of the contour line on this map is such that
13 it almost encircles the airport, so it is a rather
14 interesting feature to point out.

15 Other point source elevations that are on
16 the map are on water bodies, for instance, on Wabigoon
17 Lake there is one shown here as 366+/- . Wabigoon Lake
18 is just on the outskirts of the Town of Dryden.
19 Natural Resources has an air base there where we land
20 our planes. On Eagle Lake there is a similar figure
21 shown of 362 metres+/- . The plus or minus in that case
22 is indicating some fluctuation in the water levels and
23 that's tied to hydrogeneration on some of the Hydro
24 dams that are there on the lakes.

25 Q. Is the water elevation relevant to

1 timber management in any way?

2 A. It is, perhaps not directly on these
3 two lakes, but point source elevations on water can be
4 used from people studying the maps. For instance, it
5 is often important to know the direction of flow from
6 different water bodies if you are not familiar with the
7 area.

8 That information can be determined from
9 the topographical maps and will be useful in
10 identifying headwaters where you may wish -- you would
11 be implementing the Fish Habitat Guidelines. So using
12 topographical maps - although I would suggest that if
13 you are doing that you would want to use a different
14 scale than this one, perhaps 1:50,000 - in which to
15 identify headwater and land where you would be looking
16 at applying the habitat guidelines.

17 Some other useful information that is
18 shown on topographical maps are transportation routes.
19 If I can just draw your attention to some of the
20 highways. The paved highways on this particular map
21 are shown in red and I am just marking off is Highway
22 17. Some of the other highways that are shown here in
23 red also are Highway 502 which is the highway between
24 Dryden and Fort Frances.

25 Again, if you were coming into the area

1 new, it's the kind of information you would be
2 interested in knowing, information to orientate
3 yourself of how to get around the management unit and
4 also -- and to help to determine what kind of features
5 are out there.

6 Secondary roads or unpaved roads are
7 shown in orange on this map. If I can just point out
8 one here. The Snake Bay Road is a local name for a
9 major forest access road and I will just mark it on the
10 exhibit as Snake Bay Road. So, again, if you are
11 looking at accessing a particular part of your
12 management unit, if you are a new person coming into
13 town you would be able to find out where the access
14 roads are.

15 In addition to paved highways and unpaved
16 routes there is a variety of other information in terms
17 of items such as railways. This particular part of
18 Dryden you can see on that particular map sheet both
19 the CPR railway line and also the CNR railway line to
20 the north part. The primary direction of the
21 transportation routes for this part of the country is
22 east and west and can be seen quite evident on this map
23 with the railways and the highways going that way.

24 Some other information that would be more
25 applicable to the timber management - although a very

1 cursory introductory level - is the colour itself of
2 the map. In this case the green colour that is shown
3 here is an indication of forested portion of the land
4 and the area that's shown in white is an indication of
5 non-forested portion. I will just draw an arrow to
6 indicate where some of the non-forested is.

7 In this particular case that non-forested
8 land is primarily agricultural land. And if you were
9 step up close enough and have a look at some of the
10 contour lines, you will see that there are very few
11 contour lines in that area where there is white; an
12 indication that the land is fairly level and not very
13 steep.

14 Other information that is commonly shown
15 on these maps and is helpful to people that are coming
16 into the area is information relating to location of
17 settlements. The Town of Dryden is quite prominent in
18 this one, being almost in the centre of the map.

19 The features around the Town of Dryden in
20 this case is there is a boundary shown on the map.
21 Other smaller communities are point source -- sorry,
22 they are sort of just points and they are shown as
23 places such as Eton Rugby Place, Minnitaki, outlying
24 communities from Dryden, they are just shown as a dot
25 on the map.

1 That information would be helpful again
2 if the person is new to the area and they are trying to
3 find where the different client groups are and what
4 kind of information is available. In addition to the
5 settlement type features, there is also features that
6 deal with hydro lines, gas pipelines, airports,
7 marinas, mines, abandoned mine shafts, a variety of
8 features.

9 I will just point out where the gas
10 pipeline goes through this particular area. I will
11 just mark the map. There is a gas pipe, an indication
12 as to where the notation on the map in fact indicates
13 the gas pipeline going through.

14 There are also administrative features
15 that can be learned from the map such as this, the ones
16 that I would point out would be those for organized
17 areas. In addition, in the Town of Dryden there is an
18 indication of the Municipality of Nation which is an
19 organized township that is here in the Vermilion Bay
20 area.

21 This again would be an indication that
22 there is another level of government with which to deal
23 with if you are looking at timber management planning
24 purposes in particular.

25 Q. Could you use that map if, for

1 instance, you are considering locating a forest access
2 road?

3 A. Yes, this map would be helpful if you
4 are looking at doing primary road corridors. One of
5 the maps you could consult if you are looking at during
6 the timber management planning process, if you are
7 identifying locations for primary roads, in a very
8 preliminary fashion, you might consult this map and
9 look at the contour lines to gain an idea of the
10 profile of the land and thereby help in the selection
11 of primary road corridors. One of the--

12 Q. Mr. Kennedy, would it be helpful, at
13 all, to indicate how you would in fact use that map or
14 the information on that map to locate a forest access
15 road?

16 A. Might be. If I could just draw a
17 pictorial representation of a contour -- section of a
18 contour line and I won't pay attention to any of the
19 contour scale in terms of contour intervals on this
20 particular one.

21 But if we were to make a hypothetical
22 series of contour lines that could be found on the
23 topographical map and, as I have indicated, the
24 closeness of the contour lines would indicate the
25 steepness of the slope. It would be possible to draw a

1 profile of the line if you were looking at locating an
2 access road.

3 If an access road was contemplated to go
4 through the easterly side of this particular feature,
5 the road would encounter some steep conditions. If a
6 person was looking at putting a road through the
7 westerly side of that feature, they would be looking at
8 a more gentle slope.

9 The way in which the information could be
10 used is to transfer it on to a cross-section of the
11 topography. The person could set up a graph and draw
12 an axis such as this where you would indicate on the
13 "x" axis you would indicate distance and here height on
14 the left and you could translate this information
15 down - and I'm drawing a straight line - and indicate
16 by following -- and if you were to do that and connect
17 the dots, you can end up with an indication of the
18 steepness of the area.

19 So it would be information like that
20 which you could draw an actual number of profiles
21 through the area or in fact from the interpretation of
22 the information on the map you could visualize that
23 profile on the map by looking at doing access road
24 corridors.

25 For instance, the area here just south of

1 Dryden between Eagle Lake and Wabigoon Lake, there are
2 very few contour lines in this area, indicating that
3 it's very flat relative to the level of contour
4 interval; however, on the westerly portion of the
5 district, in the area south of Pine which is a spot on
6 the railway line, there is a number of contour lines
7 that are very close together.

8 So if you are looking at identifying
9 primary road access corridors this would be one use of
10 the information on topographical maps.

11 Q. Could you mark the hand-drawn diagram
12 or the hand-drawn information as the next exhibit.

13 THE CHAIRMAN: 327.

14 ---EXHIBIT NO. 327: Hand-drawn diagram entitled:
15 Contour and Profile..

16 MR. FREIDIN: Entitled: Contour and
17 Profile.

18 MR. KENNEDY: That concludes what I had
19 to say on this particular topographical map.

20 Sorry, it concludes, with one exception
21 and that is that there is detailed information on the
22 back of this particular topographical map which would
23 be a legend and those parties that received a separate
24 filing of this map would note the conventional signs
25 are shown on the back of them which doesn't show on the

1 map which we have had mounted. So there is additional
2 information about the features shown on the map and how
3 to interpret it by following a legend.

4 MR. FREIDIN: Q. Mr. Kennedy, you
5 indicate in your evidence that communities are
6 indicated on the map. Can you advise whether that
7 particular map indicates the location of Indian
8 communities or Indian reserves?

9 A. Yes, it does. On this map Indian
10 reserves are shown. They are shown I believe with the
11 same -- yes, I believe it is the same indication, same
12 conventional sign that is used for what I have referred
13 to as administrative features.

14 For instance, to the southwest of Dryden
15 on the shores of Eagle lake is the Eagle Lake Indian
16 reserve and that is shown and labeled as such on the
17 map. The notation on the map is Eagle Lake IR27. I
18 understand that IR stands for an Indian reserve and 27
19 is the number that has been assigned to the reserve.

20 There is also another reserve on the
21 extreme end of Wabigoon Lake which is to the east of
22 Dryden and that is the Wabigoon Indian reserve. That
23 one is also shown, a similar designation.

24 Q. Thank you.

25 THE CHAIRMAN: Do you want to mark the

1 next one as Exhibit 328, please.

2 ---EXHIBIT NO. 328: Reference No. 5 page 134 of Panel
3 VII witness statement.

4 MR. FREIDIN: Q. And I understand that
5 Exhibit 328 is reference No. 5; is it?

6 MR. KENNEDY: A. I believe it is
7 reference No. 5 on page 134 -- listed on page 134 of
8 the witness statement.

9 Q. In fact I understand that the five
10 maps that you are going to actually be describing at
11 the moment are the first five maps listed in the
12 reference list to your paper?

13 A. Yes. One of them is an aerial
14 photograph I believe, No. 3.

15 Okay. Exhibit 328 is a map that has been
16 prepared by OMNR through our Surveys Mappings Branch
17 and that information is also shown on the map. I will
18 just circle the mention of the Surveys Mappings Branch
19 and where the map is available from.

20 This particular map is at a scale of
21 1:6,720 or one inch to two miles and the name of this
22 map is Vaughan Lake. Vaughan Lake is a bay of Lac Seul
23 and it is roughly located in the centre of the map and
24 hence the name of the map.

25 There is also a reference number for this

1 map and in the upper right-hand corner -- sorry, in the
2 upper left-hand corner, first of all, is an indication
3 that this map is part of a provincial series that is
4 available for the majority of the area of the province.
5 On the upper right-hand corner, and I will circle it,
6 is a reference No. NTS52K southeast -- or SE, sorry.

7 NTS stands for the National Topographical
8 System and 52KSE is a referencing system that is talked
9 about in the bottom right-hand corner of the map.

10 Q. Could you advise what the source of
11 the information was that was used to prepare this map?

12 A. Yes. This particular map has been
13 prepared using FRI base maps without the forest stand
14 information. In this case the photographs that were
15 used were those that were flown in 1966 and the
16 information was revised in 1973.

17 Also it maybe of interest to note that
18 both the topographical map and this nap is using the
19 transverse mercator projection that was talked about
20 this morning and yesterday in terms of a great
21 referencing system and there is notations to that on
22 the map as well.

23 Q. Is there any significance to the
24 colour on that map being different than the colour on
25 the topographical map?

1 A. Yes. This particular map does not
2 show forested conditions, but there is two different
3 colours shown here. The pale yellow or buff yellow
4 colour is an indication of Crown land and the goldenrod
5 -- and I will just draw a line to the section in the
6 upper right-hand corner of the map just to indicate the
7 colour. And the dark yellow colour will indicate an
8 area around Sam Lake which is in the bottom right-hand
9 corner is a dark yellow colour and this information is
10 indicating alienated land and alienated surface rights
11 and Indian lands.

12 So there is a preliminary indication of
13 the ownership of the land on this map, although it
14 wouldn't be used for any -- finding out information in
15 terms of ownership boundaries. It gives a general
16 indication, again, information that a person coming new
17 to the unit would want to know.

18 One of the main differences I would like
19 to point out between this map and the topographical map
20 is that there is no contour lines shown on this Vaughan
21 Lake map sheet. There is, however, some point source
22 elevation features shown in a variety of spots. I
23 notice that the primary ones are shown along the CNR
24 line. Just east of Hudson -- sorry, in the Town of
25 Hudson there is a reference to the elevations there.

1 It is 1,178 feet in this particular case and on other
2 features along that line, along the CP/CNR line, there
3 is indications of other elevation points. For
4 instance, at the area that is known as Pollicon there
5 is an elevation of 1,215 feet.

6 Okay. Also a comparison to the
7 topographical map they are looking at, in terms of
8 transportation routes that I have marked up on the
9 topographical map Exhibit 326, similar features are
10 shown on 328. The paved highways again are shown in
11 red on this one. Highway 72 which is just the road --
12 which is the highway to Sioux Lookout is on the bottom
13 right-hand corner, and I'll just mark it.

14 And similarly other access roads are
15 shown. They are shown with a double line and they are
16 not to indicate any particular colour other than the
17 buff colour that is behind them. If you were to look
18 at the Town of Hudson, it is an interesting spot to see
19 the change in the road system. There is a paved road
20 that leads into Hudson, is shown in red and it is
21 Highway No. 116, and then there is a road going west of
22 Hudson which is an unpaved road and that is the forest
23 access road.

24 Q. Are forest access -- are all forest
25 access roads shown on that map?

1 A. No, all forest access roads aren't
2 shown. The major ones that in were in place at the
3 time of the revision of the map, in this case 1973,
4 would be shown but not all access roads are on there.

5 Q. Thank you.

6 A. As I have mentioned already, other
7 transportation routes in terms of the CNR line. There
8 is really -- the next major thing I would like to say
9 is that really no forest features on this particular
10 map per se. There would be some for a person that is
11 vaguely familiar with the area and has had some
12 training in map interpretation. There is some
13 indication of activities that would be associated with
14 forest harvesting and the main one that draws my
15 attention is intricate road system that is shown here,
16 an area that is southwest of Lac Seul and I will just
17 mark it as a road system.

18 That is an indication to me that
19 harvesting has taken place in the past by the nature of
20 the road system. Similar areas are seen to the north
21 of Lac Seul. This would be road systems used from
22 older logging systems.

23 As comparable to the information again
24 shown on the topographical map, there is settlement
25 features shown here. I mentioned the Town of Hudson

1 already, the community of Sam Lake, other communities
2 are shown as well, a community to the southwest corner
3 of the map of Aimsdale is also listed.

4 Q. Could you indicate whether that map
5 can be used at all during your area of concern planning
6 process?

7 A. Yes, it can be used in the area of
8 concern planning process in a variety of ways. One is
9 to provide input information for values and features.
10 There may be values and features shown on this
11 particular map and, as such a good source of
12 information, but one of the common ways of using that
13 map is to cut and paste it and end up with something
14 that is along the lines of the values map which I have
15 put in -- which I have shown here below and I seem to
16 have failed to put the exhibit number on it earlier.

17 Q. Do you know what the exhibit number
18 is Catharine?

19 A. The values map for the Timmins Forest
20 that we put in earlier. It is 301?

21 MS. BLASTORAH: 301.

22 MR. KENNEDY: The values map for Timmins
23 Forest in fact is maps of the same style of map that we
24 have been talking about, Exhibit 328, that has been cut
25 and pasted together and used as a common way of

1 conveying that information. This information that has
2 been put on here has been added on the values map, has
3 been added on top of this as a base map.

4 Just to complete on this map there is --
5 in addition to the settlement and features, there is
6 also hydro lines, airports. Some of interesting note
7 are those that are at Aimsdale and one at Sunstrohm
8 which are shown as airports, in fact they are now
9 defunct, they are not in operation but they are still
10 shown on the maps.

11 These maps are being prepared by OMNR.
12 There is an opportunity for field foresters and other
13 resource managers in districts to update these maps.
14 We have had opportunities to input to them. I
15 understand that they are updated on a regular basis.
16 Approximately every ten years there is opportunities to
17 add new features. These particular ones have not been
18 caught yet.

19 That is all the information I wanted to
20 get on the record in regards to this type of map
21 system.

22 Q. And the next map that you are going
23 to refer to, Mr. Kennedy?

24 THE CHAIRMAN: Mr. Freidin, I think we
25 are going to move back because we are not really

1 looking at anything up close. He is drawing it on and
2 it is going to be on the record.

3 MR. FREIDIN: Okay. Mr. Chairman,
4 perhaps I should have advised you, in fact I wasn't
5 aware of the fact, that each of you should have a copy
6 of these maps as part of your material.

7 THE CHAIRMAN: I think we do. I am not
8 sure we have got them with us.

9 MR. FREIDIN: I am not suggesting that --
10 I would leave it to you whether it would be helpful to
11 have your map there but I just didn't realize that it
12 was in fact -- that everybody had their maps here.

13 THE CHAIRMAN: Mark the next one, Mr.
14 Kennedy, Exhibit 329.

15 ---EXHIBIT NO. 329: Map entitled: Dryden, reference
16 No. 4, page 134 of Panel VII
witness statement.

17 MR. FREIDIN: Q. And that is Reference
18 No. 4 referred to on page 134 of the witness statement.

19 MR. KENNEDY: A. That's correct.

20 Okay. Exhibit 329 is what I refer to as
21 a master road map for the Dryden District. This map is
22 also at a scale of -- or is at a scale of 1:250,000 - I
23 will just outline that - and the title of it is Dryden.
24 The map is dated June 30, 1986.

25 I will just make a comparison to the

1 scale of map used and make a comparison back to Exhibit
2 No. 326. If one was to compare the two you would see
3 that the scale is the same and the base underneath the
4 map, if I can use that word, in terms of lake features
5 and rivers would be the same.

6 What this map is doing is showing the
7 access roads within the Dryden District. This map has
8 been prepared in Dryden by the staff there, so it is an
9 in-house publication and it has been done in order to
10 help during timber management planning and also to help
11 respond to a variety of requests that we have had from
12 resource users in terms of wanting to have up-to-date
13 access information.

14 As I indicated, the information such as
15 that that is shown on Exhibit 328 can become outdated
16 quite quickly with the development of new roads and
17 roads are of primary interest to both resource users
18 and recreationalists in order to get into an area.

19 We found this very helpful in having this
20 information available to our own staff, particularly
21 new staff coming to the area, visitors that are coming
22 to town and people such as people delivering trees to
23 planting sites. It is very easy to give them a copy of
24 this map.

25 So on here you can still see -- it is a

1 black and white production because it is done in-house
2 and printed in Dryden. This particular map you can
3 still see the features such as Highway 17, and I will
4 just point that out on the map here. Highway 17
5 running east/west and secondary roads such as the Snake
6 Bay Road which I had indicated on the other exhibit.

7 What you will find on here is an
8 up-to-date road system in that the information has been
9 transferred from aerial photographs in the district and
10 added onto this map and if you were to compare areas
11 back to Exhibit 326 you would see some new developments
12 that are shown here.

13 The way in which we keep this map up to
14 date is by using a mylar which is the original of the
15 map and the mylar is kept in the district and updated
16 annually. Where we are using aerial photographs to
17 help us determine the exact location of the roads as
18 they are being built and we add those to the end of the
19 road.

20 This particular version I have here was
21 run off in 1986 as a means of conveying the information
22 to public or staff as I have indicated. Consequently I
23 have just brought along a copy of that, but the true
24 master copy of the map is retained in the district and
25 updated annually on a mylar basis and that allows us to

1 make blueprint copies of it.

2 Q. Any particular reason for including
3 this map in the reference materials?

4 A. There are a variety of maps that are
5 kept in the district and updated on an annual basis.
6 This is one that was available in a published form, we
7 had run off several hundred copies which we distributed
8 to some of our clients and I thought it was a good
9 indication of the kind of information that we have and
10 that roads are -- other parties have expressed interest
11 in roads and how we keep our roads information up to
12 date. I thought it would be a helpful one to include.

13 Q. Can you advise whether production of
14 this kind of map is standard in other districts?

15 A. No, it is not a standard practice. I
16 am aware that some do it, but a publication of this
17 sort is not standard. However, I would indicate that
18 it would be standard practice to keep up-to-date
19 information on such things as access in a variety of
20 forms in the districts, and primarily on mylar copies so
21 they can be reproduced.

22 I am not quite finished yet, Mr. Freidin.
23 I would like now to refer to the witness statement.

24 Q. Which page?

25 A. Refer to page 136 in Volume 1 and

1 also page 137.

2 Page 136 is a portion of an FRI map for
3 basic map 502942. I have not brought a copy of the
4 entire base map along with me because I felt that the
5 Board has had an opportunity to look at an entire FRI
6 base map in evidence given by earlier panels.

7 For that reason we have only cut a
8 portion out of one map that is in the Kenora District
9 and included it here. The scale of this FRI map then
10 is 1:15,840 and, as such, it is a larger scale than the
11 other maps that I have shown at the front.

12 This map is different than some of the
13 FRI base maps that have been shown in earlier evidence
14 in that it has been annotated and additional
15 information has been added to it. The FRI features I
16 won't go into, those have been covered by Dr. Osborn,
17 but the information that has been added - if I could
18 ask you to follow along with me - if you were to look
19 at the lake that runs generally east/west through the
20 centre of the map, and just a little bit to the east of
21 centre of that lake you will see a number 49. In the
22 FRI designation that is -- the 49 is referring to the
23 area of a stand. This particular stand is 70 -- stand
24 No. 70.

25 MR. MARTEL: Can you repeat that, please?

1 MR. KENNEDY: I am trying to draw your
2 attention to stand No. 70 which is roughly in the
3 centre of the map by indicating that there is a lake
4 running east/west through the approximate centre of the
5 map and in the centre of that lake there is a number
6 49.

7 Just above the stand No. 70 there is a
8 notation of 84-85 and C.O. This stands for the
9 cut-over year. This is one of the ways in which the
10 information is recorded on FRI maps. This is referring
11 to the cut-over information that has been transferred
12 from an aerial photograph onto the map. In fact the
13 aerial photograph that has been used to derive this
14 information is that photograph that is shown on page
15 137.

16 If you were to compare the two back and
17 forth you can see -- they don't compare in terms of an
18 exact overlie. The features on the map are slightly
19 off centered, if you will, and that aerial photograph
20 that we have there is an aerial photograph that I would
21 refer to as a special aerial photograph or a
22 supplementary aerial photograph, special in that it has
23 been produced in addition to those from FRI.

24 And on that map -- on that aerial
25 photograph, again looking at page 137, I can determine

1 that there has been timber harvesting activities in
2 that area. And in terms of an annual record, that
3 information has been transferred over to the map for
4 purposes of record-keeping.

5 Some of the other information that has
6 been transferred over as well as cut-over boundary is
7 the road system that has been used and that has been
8 added to the FRI map in terms of the type of lines that
9 can be interspersed in the cut-over areas shown on page
10 136.

11 Q. And am I correct that later panels
12 will be talking about these supplementary -- is it
13 supplementary or special aerial photography?

14 A. I use the term interchangeably.
15 Special is perhaps the more common term.

16 Q. All right. And I understand that
17 that type of photography will be the subject matter of
18 later panels, including the panel dealing with
19 monitoring?

20 A. Yes, I understand it will be. We
21 currently use aerial photographs in conjunction with
22 our monitoring program, particularly compliance
23 monitoring and I understand that they will be
24 discussing that in some detail in a later panel.

25 Q. Thank you. Now, Mr. Kennedy, can you

1 advise me whether all of the maps which contain
2 information for timber management planning purposes
3 were described in this paper?

4 A. No, they were not described, I can
5 advise you of that. We have only given a selection of
6 the information that would be available.

7 Q. Could you just give an indication of
8 the kinds of subject matters that other maps might be
9 addressing?

10 A. Some of the other maps that would be
11 consulted, I think perhaps the best examples would be
12 to refer to the evidence given earlier by Mr. McNicol
13 and Mr. Ward in that there is information that they
14 have available to them in their program that would be
15 used in timber management planning and, indeed, there
16 could be some comparisons made between the information
17 that was shown on each of those individuals and some of
18 the maps that we have outlined here this afternoon.

19 Q. Would you be able to give any sort of
20 an approximation of the number of different types of
21 maps that might be referred to for timber management
22 planning purposes?

23 A. Without hesitation I would say it
24 would be in the hundreds of maps. In Dryden District,
25 for instance, it became necessary to have a separate

1 room set aside and have several large file cabinets
2 devoted strictly to the purposes of maps on the timber
3 side alone for timber management planning and there are
4 other maps located in various parts of office which
5 were consulted when needed.

6 I might add too, Mr. Freidin, that that
7 information -- having that bulk of information has led
8 to the necessity of having a values map as a means of
9 summarizing that information and making it available to
10 more people during the timber management planning
11 process.

12 Q. And along those lines you indicated
13 that these maps or that the use of maps is a means of
14 recording information. Do you feel that maps are
15 useful in terms of the public consultation process
16 within timber management planning?

17 A. Yes, there are. They have proven
18 very effective I think in two things, one is providing
19 information back to other people making it available
20 and also assisting us in recording information.

21 One of the things I was thinking of was
22 that we have used several of these maps in preparation
23 for site visits, for example Exhibit 326 is one of the
24 common scales we have used to indicate the key maps for
25 each of the site visits and we brought those into the

1 hearing room and indicated on those the general
2 locations that we would be visiting. It is an easy way
3 of communicating information to large groups.

4 Q. Could you indicate the basis upon
5 which you chose to produce the few maps that you did
6 include in the witness statement?

7 A. Well, really the basis was to provide
8 an idea of the range of information that's available
9 and the area that I selected was one that I was
10 familiar with, the Dryden area. And I thought it would
11 be helpful to show a number of maps that all related to
12 the same land base.

13 Q. You have made reference to the use of
14 aerial photographs to obtain up-to-date records of
15 certain things, I think you indicated the roads. Could
16 you give an idea of the other sorts of conditions which
17 might be updated through the use of aerial photographs?

18 A. Well, in addition to using it to help
19 keep track of new road locations, the aerial
20 photographs are used for purposes such as keeping track
21 of harvested areas, for mapping wildlife -- I am sorry,
22 for mapping wild fires that have occurred and, indeed,
23 to help during the suppression of them.

24 We have used them for contract monitoring
25 in terms of monitoring areas that have been site

1 prepared. Those are some of the common features that
2 have been used in timber management and, of course, we
3 often take photographs for special purposes for use
4 during timber management planning.

5 I say that we often take them in that it
6 is now common to have access-- I believe it is correct
7 to say that all of our districts have access to both
8 cameras and darkroom equipment where they can take
9 their own photographs on an as needed basis with the
10 opportunity to use the Provincial Air Service, we are
11 able to obtain our own photographs and produce those
12 similar to that shown on page 137 of the witness
13 statement which is actually a very high quality
14 photograph taken by the staff in the Kenora District.

15 Q. How frequently are aerial photos used
16 for resource management and, in particular, timber
17 management?

18 A. I would say on a daily basis.

19 Q. Do aerial photographs play any role
20 in monitoring in the sense that it is done at the
21 present time?

22 A. I would say that they do. In some of
23 the items I have indicated, the use of the photographs
24 in fact is a form of monitoring. Compliance
25 monitoring, if you will, would be one way of using the

1 photographs. For instance, if a road had been
2 determined -- or if a specific location had been
3 determined for a road and the approved plan and showed
4 that road, it would be possible to keep track of the
5 road development by taking aerial photographs and
6 having a permanent record of that information.

7 That's one example how they could be used
8 in the monitoring program.

9 Q. Okay, thank you. Now, the next
10 section of the report, Mr. Kennedy, begins at page 112
11 and deals with a subject matter which was dealt with at
12 some length by Dr. Osborn the FRI, Forest Resources
13 Inventory.

14 And you would agree that only a couple of
15 questions need be asked in relation to this topic and
16 the first one I would just like to have you address is
17 one which arises out of page 114, primarily for the
18 purpose of clarification.

19 In the second last line on that page
20 reference is made to site protection forest. We have
21 heard about protection forest. Can you indicate to me
22 what the phrase site protection forest means?

23 A. It is simply a short form for site
24 class forest. You have heard it before as being a way
25 in which protection forest is designated, that being

1 height over age and it is termed here as site on the
2 computer printouts that are mentioned here in terms of
3 the reports. It is a way of condensing the information
4 and making the columns smaller.

5 Q. Can you turn to page 115. I would
6 refer you to Section 3.3.

7 A. Yes.

8 Q. And it speaks about -- it states
9 that:

10 "These FRI databases are one of the most
11 important sources of information used at
12 the field level for the planning and
13 Implementation of all timber management
14 activities. They are one of the few data
15 sources referred to on a daily basis for
16 a wide range of uses."

17 And they give examples of planning and
18 mapping of eligible and selected stands and then goes
19 on and gives some other examples.

20 Could you explain very briefly, because I
21 know you will be dealing with it in more detail in
22 Panel 15, what is mean by the terms eligible and
23 selected stands?

24 A. Yes. Perhaps I could start by giving
25 some reference to the EA Document which may be helpful

1 for those that want to follow along in more detail. If
2 I could refer the Board to page 130 which is the
3 discussion in Step 3 of the planning process that deals
4 with eligible areas.

5 Q. That's page 130 then of Exhibit No.
6 4?

7 A. Yes, of the EA Document. And also I
8 would like to refer the Board to page 138 which is a
9 discussion of the selection stands which is part of
10 Step 4 in the planning process.

11 Just to capsulize what is contained there
12 though I would indicate that the eligible stands is an
13 identification of those stands where timber management
14 activities: Harvest, renewal and maintenance may take
15 place over the 20-year period of the timber management
16 plan.

17 The difference is that in the selection
18 of stands, selected is referring to those stands that
19 are selected from within those that have been
20 identified as being eligible, they are selected for
21 operations during the 5-year term. So the main
22 distinction there is that eligible operations may
23 occur; in selected stands operations will occur and
24 they will occur within five years.

25 Q. And those two terms, when you say in

1 areas selected for operations, is the operation limited
2 to harvest or does it refer to the other timber
3 management activities as well?

4 A. It refers to other activities, those
5 being renewal and maintenance.

6 Q. Thank you. Can you just turn to
7 operational surveys for a moment which is dealt with at
8 page 116 to 118. And, again, we have agreed not to
9 repeat any of Dr. Osborn's evidence in relation to that
10 matter.

11 A. Yes, we have.

12 Q. If I can just refer you, however, to
13 page 118 where there is reference under the Section
14 4.4, go down to almost the end of the third bullet
15 point, we are talking -- it says here:

16 "The data collected has a variety of uses
17 including..."

18 And then it indicates some of the -- as
19 one use:

20 "...in operational planning such as
21 decisions on renewal treatments."

22 Could you provide an example of a
23 situation where operational planning on a matter of
24 renewal treatments would make reference to the OPC
25 data?

1 A. It would be possible to have a look
2 at information that is contained in the operational
3 surveys data in relation to the stand composition,
4 species that are present, perhaps there may be
5 hardwoods there where there is no market and the
6 information contained in the surveys on the size and
7 number of trees present.

8 That information may influence the choice
9 of site preparation equipment or may indicate that you
10 may encounter site preparation difficulty if there is
11 no market for the hardwoods, an example that I've used.

12 MR. FREIDIN: Mr. Chairman, those are our
13 questions on FRI and that is one of our examples of
14 scoping.

15 MR. MARTEL: What about the other
16 parties?

17 MR. FREIDIN: We will see, I guess.

18 Q. Could we turn to page 131 of the
19 report or the next area that I understand you want to
20 deal with begins at page 131 and 132 and that is
21 reference to annual records.

22 Mr. Kennedy, can you advise whether
23 annual records of timber management activities and
24 changes in the forest are recorded in a number of ways?

25 MR. KENNEDY: A. Yes, they are recorded

1 in a number of ways.

2 Q. Could you just give an indication of
3 the various types of ways that that information gets
4 recorded?

5 A. Yes. On page 132 of the witness
6 statement in Section 9.2 I have indicated that some of
7 the ways are maps, aerial photographs, index cards and
8 project files as well as field reports that are filed.

9 So there is a wide variety of ways in
10 which the information that is collected on an annual
11 basis is recorded.

12 Q. How much information are we talking
13 about when you are talking about annual records? Are
14 we talking about a table full, a desk full, a drawer
15 full, a room full?

16 A. If you were to put it altogether, in
17 my experiences in Dryden, for instance, if you were to
18 put it altogether you would be looking at several rooms
19 full of information that is collected and maintained on
20 an annual basis.

21 Some of that information serves
22 historical purposes, very vital to portions of the
23 timber management planning process. Other information
24 is site-specific and is important to have on file for a
25 shorter period of time. But by and large the

1 information that we have collected there would fill
2 several rooms. Some of that is maintained in a summary
3 form as well.

4 Q. You refer to the use of historical
5 information for timber management planning. How would
6 that historical information get used in that process?

7 A. How would it be used during timber
8 management planning?

9 Q. Yes.

10 A. During Step 1 of the timber
11 management planning process, Step 1 is the assembly and
12 analysis of background information and it is necessary
13 to consult all sources of information we have available
14 to us and, as such, it would be standard practice to
15 consult annual records and summaries of annual records
16 and the way that it has been formalized in the timber
17 management planning process is the direction in the
18 timber management planning manual for each forestry to
19 prepare a report of the past forest operations.

20 And, in that sense, the forester is
21 summarizing the information that is contained in the
22 annual records and, indeed, the information that is
23 contained in the annual work schedules as well.

24 MR. FREIDIN: Those are the questions on
25 annual records, Mr. Chairman. I can advise you in

1 relation to Section 10 which is wood utilization and
2 mill licence return that we believe that it is not
3 required to add any evidence to the evidence that Mr.
4 Armson gave in relation to woodflow in Panel 3 or the
5 discussion by Mr. Gordon in Panel 4 of wood utilization
6 in terms of both mill recovery rate and utilization in
7 the bush.

8 I should also advise the Board in relation
9 to Section 7 of this paper found at pages 128 and 129,
10 not satisfactorily regenerated surveys commonly
11 referred to as NSR surveys, we don't intend to lead any
12 further evidence in relation to that matter to
13 supplement the evidence that Mr. Gordon gave in Panel
14 No. 4.

15 Q. In relation to Section No. 8, Mr.
16 Kennedy, entitled: Forest Insect and Disease Survey,
17 you will find at page 129 to page 131 of your paper.

18 You indicate on page 131 that an
19 explanation of the collection and use of this type of
20 data is outlined in Appendix 3 of the Environmental
21 Assessment Document which has been marked Exhibit No. 4
22 and that it will form part of the evidence of a
23 subsequent witness panel.

24 Can you guess the panel?

25 MR. KENNEDY: A. Yes, I can, Mr.

1 Freidin. That's Panel No. 15 that will be dealing with
2 the Appendix 3 in the Class EA Document.

3 Q. Can you advise: Is there anything
4 you would like to add to the description in the witness
5 statement, or areas of the witness statement you wish
6 to highlight in relation to this topic at this
7 particular time?

8 A. Being that there has not been
9 information led on that topic to date, what I would
10 like to do is highlight a couple of key features that
11 are shown on page 130 of the witness statement.

12 And highlight that there is a variety of
13 maps that are available as a result of the forest
14 insect and disease survey information that's prepared
15 with the Canadian Forestry Service and that information
16 would be reflected in items such as a defoliation map,
17 a map showing where insects have defoliated trees, egg
18 mass count maps, which would be resulting from surveys
19 where actual branch samples have been collected in the
20 field and egg mass counts made and that information
21 recorded on a map form and forecast maps where
22 predictions are made as to where defoliation will occur
23 in following years. Just some of the key mapped
24 information that is used in conjunction with Appendix 3
25 and I thought it would be helpful to highlight that.

1 . And the other portion of this I would
2 like to highlight is about halfway through the
3 paragraph 8.2, the first paragraph on page 130.

4 It is reference to the summer bulletins.
5 The summer bulletin indeed is one of several bulletins
6 that are produced throughout the year by the Canadian
7 Forestry Service through the Great Lakes Forestry
8 Research Centre in Sault Ste. Marie and that
9 information is one of the means by which forest
10 managers keep up to date on the conditions that are in
11 the forest.

12 Q. In relation to the information which
13 is produced through these forest insect disease
14 surveys, can you just give an indication as to when
15 that information gets used and by whom it gets used?
16 In other words, how frequently is this material
17 referenced, in particular I am thinking of the maps?

18 A. The maps are produced once a year if
19 there is the information available and I say that in
20 terms of there may be conditions done warrant the
21 production of a map.

22 Simply put, if there is no defoliation
23 occurring, you don't produce a map showing no
24 defoliation. In situations where there would be
25 defoliation occurring from insects such as jack pine or

1 spruce budworm, then there would be defoliation maps
2 produced really once a year and then the egg mass
3 counts maps would also be done once a year.

4 Q. Thank you.

5 A. However, the summer bulletins is an
6 indication, or the bulletins in general would be
7 consulted throughout the year upon their release for
8 managers to get an understanding of the conditions of
9 the forest as they are out there.

10 Q. Mr. Kennedy, I understand the last
11 paragraph of your evidence is Part No. 5 in relation to
12 soils and sites which begins at page 118 and continues
13 onto page 124.

14 MR. FREIDIN: Mr. Chairman, I think I
15 should warn you to calm yourself if you are thinking we
16 are going to finish today. I think we will need a
17 little bit more than the 35 minutes left to deal with
18 this last section.

19 THE CHAIRMAN: We will try and remain
20 calm.

21 MR. KENNEDY: And, Mr. Freidin, perhaps
22 you could ask for a five-minute stretch while we switch
23 some these maps around. There are several maps at the
24 back of the room to exchange.

25 THE CHAIRMAN: Okay. Why don't we just

1. break for a quick five minutes.

2. MR. FREIDIN: A quick five sounds good to
3. me, Mr. Chairman.

4. ---Recess taken at 1:25 p.m.

5. ---Upon resuming at 1:35 p.m.

6. THE CHAIRMAN: Be seated, please.

7. MR. FREIDIN: Mr. Chairman, we are
8. planning to go until two o'clock?

9. THE CHAIRMAN: About then.

10. MR. FREIDIN: Okay.

11. Q. Just one matter I would like to go
12. back on in relation to the maps produced by Mr.
13. Kennedy, in particular Exhibit 329 which was the master
14. road map.

15. Mr. Kennedy, in your evidence you
16. indicated that a map such as that was not published in
17. every district, or you didn't know whether it was, but
18. you didn't believe it was published in every district.

19. What do you mean by published?

20. MR. KENNEDY: A. Since I was using a
21. term there, it was copies made available to the public.

22. Q. And can you advise whether other
23. districts have maps like that in the district?

24. A. I would say yes, in all cases the
25. districts have up-to-date road information and they are

1 available in the district and that they would be kept
2 in a variety of forms.

3 But it would -- what I was not sure of
4 was if districts make them available to the public as a
5 standard practice, but it is standard practice,
6 however, to keep up-to-date road information.

7 MR. FREIDIN: Thank you. One
8 housekeeping matter, Mr. Chairman. In relation to
9 Exhibit 293 which is was Interrogatory No. 3 from
10 Mosquin Bio-Information Limited, I would just ask
11 that -- in fact, I think perhaps I will do this as a
12 matter of housekeeping. I am going to want you to add
13 a word to the interrogatory answer.

14 Do you have one with you?

15 THE CHAIRMAN: Which number?

16 MR. FREIDIN: Exhibit 293. I apologize
17 for breaking the examination-in-chief, but these are
18 the sorts of things, if I don't do them now they may
19 get lost somewhere between the cracks.

20 THE CHAIRMAN: Okay.

21 MR. FREIDIN: Interrogatory No. 10 from
22 Mosquin Bio-Information, Exhibit 293. In the answer,
23 in the sixth line there is reference to sculpin. It
24 should read spoonhead sculpin.

25 Mr. Ward approached me and he wanted to

1 make sure that it was perfectly stated. He didn't want
2 to have an error there.

3 THE CHAIRMAN: Well, we realized that,
4 Mr. Freidin, but we didn't want to interrupt you.

5 MR. MARTEL: I didn't sleep last night.

6 MR. FREIDIN: I didn't sleep last night
7 either.

8 Q. Now, the last part of the paper,
9 soils and site page 118. Is there any significance,
10 Mr. Kennedy, to the choice of the title for this
11 section when it says soils and site, and I emphasize
12 the word 'and'?

13 MR. KENNEDY: A. Yes, there is a
14 significance in that both soils and site information is
15 needed in timber management and the distinction made
16 between them is that in this case that soils are the
17 organic layer and the mineral soil, and site is a
18 broader context referring both to the soils itself and
19 the physiographic features such as slope.

20 Q. In this section or Part 5 of the
21 report there is a description of forest ecosystem
22 classification and we find that at pages 119 to 122 and
23 there is also a section which describes forest soils
24 and productivity surveys and the information in
25 relation to those is found at pages 122 to pages 124.

1 Could you describe, in general terms,
2 what each of those phrases refer to?

3 A. Okay. The forest ecosystem
4 classification is a system that is used to classify
5 portions of the forest into, if you will, areas that
6 have similar features such as vegetation and soils.

7 The forest soils productivity surveys are
8 inventories that provide soil-specific information. So
9 one is a classification system that is to be used when
10 working in a particular area for which the system was
11 developed, and the other is an inventory which is
12 providing information up front at time zero.

13 Q. Is there a common purpose, however,
14 to the two types of databases?

15 A. Yes. The common purpose would be to
16 obtain soils information that would be useful to the
17 forest manager and other resource users in resource
18 management.

19 Q. Can I just ask a couple of questions
20 perhaps by way of clarification of your earlier
21 evidence. Can you advise whether they provide the
22 information about the soil in the same way?

23 A. They do not provide the information
24 the same way. In the soils inventory there is a
25 variety of maps that are produced which provide

1 specific information of soil characteristics for the
2 areas that have been surveyed.

3 The classification system, on the other
4 hand, provides consideration of the type of soils that
5 are likely to be present based on vegetation
6 characteristics that are found on the site.

7 The distinction would be that in a forest
8 ecosystem classification there is an indication of the
9 kind of soils that you might expect to be present,
10 whereas on the inventory side of things there is an
11 actual inventory that tells you what is there.

12 Q. Does conducting a soils survey and
13 creating a forest ecosyste classification require any
14 special expertise?

15 A. Yes, it does. I would -- I was
16 reflecting on your choice of words in terms of the
17 development of the forest ecosystem classification
18 itself and the carrying out of the soils survey would
19 require someone to have extensive soils background; and
20 essentially be a soils scientist, although the eco
21 system classification is produced by a team of
22 individuals which includes more than a soils scientist.

23 But, yes, detailed soils -- formal soils
24 training would be required in order to assist in the
25 development of a forest ecosystem classification or a

1 soils survey.

2 Q. Are you aware of whether other sorts
3 of experts, other than soil -- experts in soil, were
4 involved in preparing the forest eco system
5 classifications which are referred to in the evidence?

6 A. Yes. In the evidence we have filed
7 the forest ecosystem classification for the Clay Belt
8 which is indicated as Reference No. 8 on page 134 of
9 the witness statement.

10 In that particular case there is a
11 variety of -- there is a team that has been used, is an
12 author of the document and on that team there are
13 forest ecologists, there are soils scientists, and a
14 variety of scientists that were used or that were
15 involved in the production of it, as well as field
16 foresters.

17 MR. FREIDIN: Mr. Chairman, perhaps at
18 this time I could file as the next exhibit a document
19 entitled: Field Guide to Forest Ecosystem
20 Classification for the Clay Belt, Site Region 3E.

21 THE CHAIRMAN: Exhibit 330.

22 ---EXHIBIT NO. 330: Document entitled: Field Guide to
23 Forest Ecosystem Classification
 for the Clay Belt, Site Region 3E.

24 MR. FREIDIN: (handed)

25 THE CHAIRMAN: Thank you.

1 MR. FREIDIN: Q. Now, Mr. Kennedy, you
2 have indicated the type of expertise which was involved
3 in preparing the forest ecosystem classification and
4 the soils surveys.

5 Can you advise the purpose for which the
6 forest ecosystem classification and the soils surveys
7 that you referred to in your evidence were prepared;
8 what was the purpose for which they were prepared?

9 A. The primary purpose they were
10 prepared for was to assist the field foresters in
11 understanding the soils conditions that they have and
12 their use in both timber management planning, also use
13 in operational planning.

14 Q. And does a forester have difficulty
15 using or applying the information provided by those two
16 sources, the forest ecosystem classifications and the
17 soils surveys if they are not involved in the
18 collection of the base information itself?

19 A. No, those that have been -- those
20 that have had formal training, foresters who have had
21 formal training would have had basic soils information
22 as part of their course material and, as a result, they
23 would be familiar with the kinds of features that are
24 talked about in the classification system or indeed
25 that are presented in soil survey information.

1 Q. Excuse me. You indicated in your
2 earlier evidence that foresters were involved in the
3 preparation of the forest ecosystem classification, if
4 I recall your evidence correctly?

5 A. That's correct.

6 Q. If they don't have any specific
7 expertise in producing that type of document, could you
8 indicate what input they did have to that process?

9 A. Well, one of the key features of
10 producing a FEC -- not a key feature, but one of the
11 important points to be considered in producing a FEC is
12 to make it workable at the management unit level.

13 It has to be operational, if you will,
14 for a field forester and that is one of the reasons
15 that field foresters were involved in the development
16 of the classification system. They were there to
17 provide advice on how that information could be used at
18 the local level. They are also there to provide
19 information on the -- based on their experiences that
20 they have gained over time.

21 Q. Following along from that then, could
22 you describe how those two sources of soil information
23 are used?

24 A. Okay. In order to go into their use,
25 I think it would be wise to split them up and go

1 through the FEC itself, the forest ecosystem
2 classification.

3 So if I could refer the Board then to
4 document Exhibit No. 330, I would like to try and
5 highlight some of the features of the guide itself and
6 the manner in which it is applied.

7 I think by way of an overview, if I can
8 take the Board right to the Roman numeralled page III
9 which talks about the guide and its contents, it is
10 very easy to see the type of contents that are shown
11 there by chapter or section.

12 One of the ways in which I would like to
13 approach it though is to indicate to the Board that the
14 bulk of the guide is contained in a section that is
15 titled Plant Recognition, Section 8 which runs between
16 page -- starts at page 53 and I believe it goes right
17 up to page 117. So it is indeed -- about half of the
18 information that is contained in the guide is
19 information that is related to plant identification.

20 That information is there in the guide in
21 order to assist in later stages of the use of indicator
22 species which I will get into a minute in terms of give
23 an indication of the type of soils that are present,
24 but the bulk of the guide is contained in the plant
25 recognition section.

1 Now, the next thing that I would draw the
2 attention to that is in the guide is the number of
3 keys. By keys I am referring to -- another common name
4 is a decision tree. There are keys that are contained
5 in Section II. Decision tree being where a person asks
6 themselves a number of questions commonly: Yes/no.
7 Answers are -- yes/no answers are required and the two
8 keys that are contained here are ones that are in
9 vegetation that is found in Section II and a soils key
10 that is found in Section V.

11 Q. And which pages will the Board find
12 those two keys on?

13 A. Those two keys, the vegetation keys
14 are found between pages 4 and pages 9. They are in
15 there in English and French and Latin, if you will. I
16 say Latin in terms of the scientific name keys using
17 the Latin on pages 4 and 5.

18 The same information is repeated on pages
19 6 and 7 in English and the same information is repeated
20 on pages 8 and 9 in French. Also I should draw the
21 Board's attention to page 1 which is the orientation
22 of the classification itself which is an indication of
23 where the classification applies to and that is within
24 the clay belt as the title implies in Site Region 3
25 which is the clay belt which is in the vicinity of

1 Hearst, Kapuskasing, Cochrane and Timmins as indicated
2 on page 1.

3 The importance of that is that this
4 forest ecosystem classification has been developed for
5 use within that area and would not be applicable
6 outside of the clay belt. That is one of the important
7 features to note when someone is dealing with the
8 guide.

9 The next big section that is contained in
10 the guide is in a variety of spots. I would summarize
11 as calling it graphical representation of typical sites
12 that could be found and by that I am referring to the
13 pages that are contained right from page 17 -- 17 and
14 18 and then the individual descriptions that are
15 contained on pages 20 through to 33; a graphical
16 representation of different types of features that
17 might be found on those sites.

18 And then a follow-up, there are sections
19 that deal with the use of the guide in particular and
20 that deals with Section II on page 3 and some of the
21 sections in -- some of the pages in Section III
22 starting at page 11.

23 So in summary then, the bulk of the guide
24 is contained in a plant identification or plant
25 recognition manual and the information related to using

1 that information and applying the classification
2 system.

3 Now, in continuing I would like to give
4 an overview of how the classification system would be
5 applied. I have indicated that it has to be applied
6 within the clay belt area and it is Section II gives
7 details of how the guide is to be applied.

8 First of all, I should make a note that
9 the way in which staff are trained -- the way staff
10 become familiar with this is to attend a number of
11 training sections which deals in some detail as to the
12 way in which the guide is to be applied in the field.
13 As such, there is some difficulty in explaining it to
14 the Board here in the hearing room setting in that the
15 training courses do involve a number of field days
16 where there is opportunities for the foresters to take
17 the guide in hand and go through a trial period of
18 using it on the various sites looking at different
19 vegetation and following through the keys and ending up
20 looking at soils and soil pits and that is part of the
21 training program.

22 THE CHAIRMAN: Mr. Freidin, without
23 interrupting the flow of your examination, what is the
24 purpose of the Board knowing all the detail involved in
25 how to take this document, for instance, out into the

1 filed and apply it?

2 MR. FREIDIN: We have no intention of
3 going through this document in that level of detail. I
4 don't believe that Mr. Kennedy will be much longer, but
5 we believe that it is important that the Board
6 understand that there are a number of sources of
7 information, if I might, about the soil and I think it
8 is necessary that the Board have a clear understanding
9 of the differences between soil surveys and forest
10 ecosystem classifications and the type of information
11 that is produced.

12 So I don't intend to have the witness
13 spend very long, I wouldn't think.

14 Q. If you can give me an estimate, Mr.
15 Kennedy, how long you think you would be dealing with
16 this document?

17 MR. KENNEDY: A. I think 10 and 15
18 minutes is all -- is the amount of time I intended to
19 spend for now doing that.

20 THE CHAIRMAN: Okay. I just did not want
21 to get into a sort of course on it, but I am not sure
22 it is all that applicable to the end result of this
23 hearing.

24 MR. FREIDIN: Mr. Chairman, that
25 sentiment is something which I have been thinking a lot

1 about in terms of certain objectives of a hearing, and
2 so I am not surprised to hear you say that.

3 It is almost two o'clock. Perhaps this
4 would be a convenient time to adjourn and it does look
5 like we will finish by the end of month.

6 THE CHAIRMAN: Well, if Mr. Kennedy is
7 being candid in his estimate that it is only going to
8 take about ten minutes...

9 MR. FREIDIN: There is other evidence.

10 THE CHAIRMAN: No, no, no, for this.

11 MR. FREIDIN: That would be on the forest
12 ecosystem classification. We are going to deal shortly
13 with soil surveys and we will deal with a few follow-up
14 questions. We can't finish in 15 minutes, in fact, I
15 think it may take us 45 minutes to an hour to finish.

16 So unless you are willing to sit until
17 three o'clock, Mr. Chairman, I would suggeston that
18 this would be an appropriate time for an adjournment.

19 THE CHAIRMAN: You have got it.

20 Okay, we will adjourn until Monday.

21 Unfortunately, we will have to commence at one o'clock,
22 but we will probably sit as late as we can on Monday to
23 get in as full a day as possible.

24 Thank you.

25 MR. FREIDIN: one o'clock start, Mr.

1 Chairman?

2 THE CHAIRMAN: That's correct.

3 ---Whereupon the hearing adjourned at 2:00 p.m., to be
4 reconvened on Monday, November 7th, 1988, commencing
5 at 1:00 p.m.

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